United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with the Fairbanks Soil and Water Conservation District; Alaska Department of Natural Resources, Division of Agriculture, Division of Forestry, Division of Geological and Geophysical Surveys, and Division of Land; Fairbanks North Star Borough; Tanana Chiefs Conference, Inc.; City of Fairbanks; U.S. Army Corps of Engineers, Chena Lakes Flood Control Project; Alaska Cooperative Extension; University of Alaska Fairbanks, Agricultural and Forestry Experiment Station

Soil Survey of Greater Fairbanks Area, Alaska

How To Use This Soil Survey

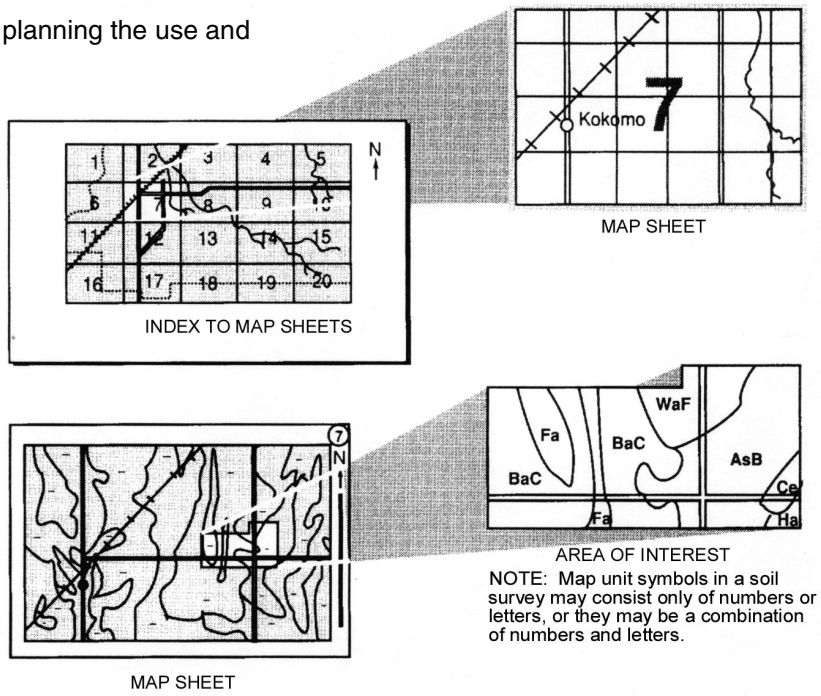
Detailed Soil Maps

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



NOTE: Map unit symbols in a soil survey may consist only of numbers or letters, or they may be a combination of numbers and letters.

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural and Forestry Experiment Station, and local agencies. The Natural Resources Conservation Service has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this survey began in 1996 and was completed in 2000. Unless otherwise indicated, statements in this publication refer to conditions in the Survey Area in 2000. This survey was made for the Greater Fairbanks Area, Alaska by the Natural Resources Conservation Service; the Fairbanks Soil and Water Conservation District; Alaska Department of Natural Resources, Division of Agriculture, Division of Forestry, Division of Geological and Geophysical Surveys, and Division of Land; Fairbanks North Star Borough; Tanana Chiefs Conference, Inc.; City of Fairbanks; U.S. Army Corps of Engineers, Chena Lakes Flood Control Project; Alaska Cooperative Extension; University of Alaska Fairbanks, Agricultural and Forestry Experiment Station.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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Cover: A typical landscape in the Greater Fairbanks Area. Mine tailings are in the foreground with Minto, Fairbanks, and Steese soils on the hills in the background.

Additional information about the nation's natural resources is available on the Natural Resources Conservation Service home page on the World Wide Web. The address is http://www.nrcs.usda.gov.

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Foreword

This soil survey contains information that can be used in land-planning programs in the Greater Fairbanks Area, Alaska. It contains predictions of soil behavior for selected land uses. The survey also highlights limitations and hazards inherent in the soil, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

This soil survey is designed for many different users. Farmers, ranchers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Government agencies, community officials, Alaska Native tribes, engineers, developers, builders, and home buyers can use the survey to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the survey to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are shallow to bedrock or to permafrost. Some are too unstable to be used as a foundation for buildings or roads. Wet soils are poorly suited to use for waste treatment systems. A high water table makes a soil poorly suited to basements or underground installations.

Many soil properties that affect land use are described in this soil survey. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described. Information on specific uses is given for each soil. Help in using this publication and additional information is available at the Fairbanks office of the Natural Resources Conservation Service or Alaska Cooperative Extension.

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State Conservationist
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Soil Survey of the
Greater Fairbanks Area, Alaska

By Dennis Mulligan, Natural Resources Conservation Service

Fieldwork by Dennis Mulligan, David K. Swanson, Mike Mungoven, David A. Puetz, Amber Williams, Erin Schneider, and Adam Hill, Natural Resources Conservation Service

United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with the Fairbanks Soil and Water Conservation District; Alaska Department of Natural Resources, Division of Agriculture, Division of Forestry, Division of Geological and Geophysical Surveys, and Division of Land; Fairbanks North Star Borough; Tanana Chiefs Conference, Inc.; City of Fairbanks; U.S. Army Corps of Engineers, Chena Lakes Flood Control Project; Alaska Cooperative Extension; and the University of Alaska Fairbanks, Agricultural and Forestry Experiment Station

General Nature of the Survey Area

The Greater Fairbanks Area is in the interior of Alaska (Figure 1). The survey area is approximately 257,703 acres (104,370 h) in size. The population center of the survey area is the city of Fairbanks, which is also the commercial hub of interior and northern Alaska and the second largest city in the state.

The Greater Fairbanks Area lies within two Major Land Resource Areas: the Interior Alaska Highlands and the Interior Alaska Lowlands. The Interior Alaska Lowlands portion of the survey area includes the broad, level flood plain that boarders the Tanana River and its main tributary in this area, the Chena River. Riverine features dominate the landscape and include meandering streams, sloughs, and oxbow lakes. The Interior Alaska Highlands portion of the survey area consists mostly of low mountains and dissected hills interrupted by flat-bottomed valleys. Slopes are generally steep. Usually, gently sloping alluvial fans lie between the Highlands' hills and the Lowlands' flood plain, but in many places the transition between the level flood plain and steep hills is abrupt.

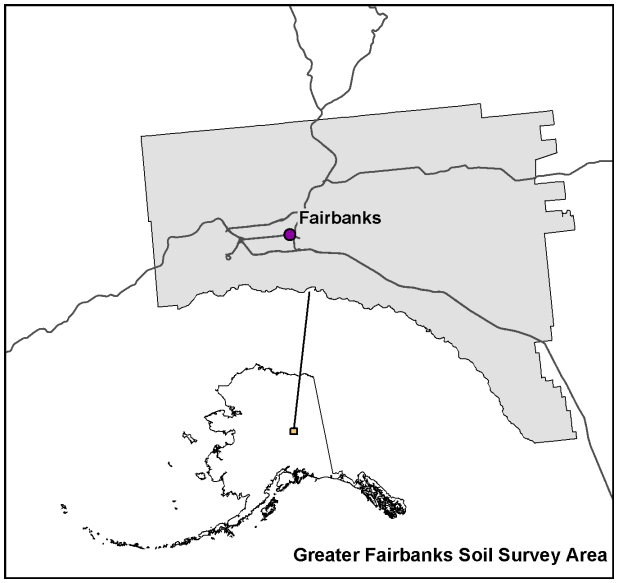

Figure 1.—Location of Greater Faribanks Area in Alaska.

Geology

The Tanana River valley is a structural basin between the Alaska Range on the south and the

Interior Alaska Highlands on the north. Much of the floor of this basin is below sea level and covered by 330 to almost 660 feet (100 to almost 200 m) of Quaternary fluvial and glaciofluvial sediments primarily from the Alaska Range. The history of these deposits relate to glacial advances from Illinoian to Wisconsin times. The glaciofluvial sand and gravel are covered with finer sediments and organic material of varying thickness. These deposits are saturated with water, in most places below the depth of observation for this survey (6 ft. or 2 m) but occasionally within a foot or two of the surface. Permafrost is present in the basin and covers approximately one-third to one-half of the area. Elevations in the Tanana River valley range from about 400 to 475 feet (121 to 144 m) above sea level.

Elevations in the Interior Alaska Highlands range from about 450 to 2,006 feet (136 to 610 m). Geologic materials consist of weathered bedrock covered with windblown silt (loess). The predominant bedrock in the area is highly deformed Paleozoic and Precambrian schist. The schist is highly weathered and fractured near the surface with local intrusions of igneous rocks that are mainly granite, quartz, diorite, and basalt. The loess is only about a foot or two thick (< 1 m) on most hilltops and upper slopes. It may be many feet thick on hills nearest the Tanana River and on the lower slopes of hills elsewhere where the loess has been eroded from the hillsides and has accumulated on lower slopes and in narrow upland valleys. Permafrost is present on lower slopes, valley bottoms, and north-facing slopes. Large bodies of ground ice are present in the thick silty deposits on lower slopes and valley bottoms. Periglacial features such as pingos, thermokarst pits and mounds, ice wedge polygons, and beaded streams dominate these lower slopes and upland valleys.

Climate

The survey area has a continental subarctic climate with long, cold winters and short, warm summers. Summer (June, July, and August) temperatures average 58 degrees F (15 degrees C). Winter (November through March) temperatures average 0.5 degree F (-18 degrees C). Extreme summer temperatures may exceed 90 degrees F (32 degrees C) while extreme winter temperatures may dip below -60 degrees F (-51 degrees C). The average annual precipitation is 12 inches (30 cm), with July and August on average the wettest months and April the driest. Snow covers the ground continuously from October to late April or early May. Tables 1, 2, and 3 give a detailed summary of climatic data.

Forestry

The forest types in the Greater Fairbanks Area are a mosaic of patterns related to fire history, slope and aspect, and the presence or absence of permafrost. Forest stands are classified by the dominant species, but most are a mixture of two or more species.

The forest vegetation pattern of this area is complex. Forests of white spruce, paper birch, and aspen dominate lower slopes and most south-facing slopes. Black spruce forests typically grow at higher elevations on north-facing slopes and at lower elevations in areas where drainage is impeded.

The white spruce forests of interior Alaska are the best developed and most productive forests of this region. They have a minor component of paper birch and balsam poplar and, on the best sites, trees will be 98 feet (30 m) in height and 35 inches (90 cm) in diameter. Tree densities may be as high as 9,800 to 12,000 per acre (4,000 to 5,000/h) in younger stands but are typically between 1,400 and 2,400 per acre (600 and 1,000/h) in older stands. Where the canopy is closed an alder and willow shrub layer can be found. Common smaller shrubs found in the white spruce forests are bog blueberry, crowberry, lingonberry, Labrador tea, and dwarf birch. White spruce forests can regenerate after a fire but often are the result of a successional change from hardwood pioneering species such as paper birch and aspen. The white spruce forests have economic importance in terms of supplying local saw mills with timber and providing home building logs for the area.

Paper birch forests are found on better-drained, usually silty-textured soils. These forests are typically a result of fires and will usually be replaced through succession by white spruce or black spruce forests. Trees range from 59 to 82 feet (18 to 25 m) in height and up to 18 inches (45 cm) in diameter. Tree densities range from 15,000 trees per acre (6,000/h) in younger stands to 400 trees per acre (160/h) in mature stands. Common shrub components are alder and highbush cranberry. Lingonberry and twinflower are common ground covers, as is Canada bluejoint if stocking density is low.

Black spruce forests dominate wetter and colder sites. The trees may attain a height of 30 feet (9 m) with a diameter of 4 inches (10 cm) in the course of 100 years. These are low productivity sites with young stocking densities up to 15,000 trees per acre

(6,000/h) and mature densities that may be as high as 10,000 trees per acre (4,000/h). Shrubs associated with black spruce forests are alder, willow, and Labrador tea. Sphagnum and club mosses with some crowberry, lingonberry, and bog blueberry dominate ground cover.

Aspen forests and balsam poplar forests are also found in the Greater Fairbanks Area. These forests often grow in areas of relatively recent soil disturbance, such as flood plains or areas subjected to hot intense fires.

Use and Management of Soils for Agriculture

Soils have a wide range of characteristics that influence their potential for agricultural development. A thorough understanding of soil properties can ensure maximum agricultural benefits while preserving the integrity of the resource base.

Woodland covers most of the soils in the survey area. Some of these soils are suitable for clearing and development for pasture, hay, and cool season row crops. North-facing slopes are generally not suitable for agricultural development because they lack sun exposure and tend to be colder. They may also settle unevenly after clearing because of permafrost. Ridge tops generally have good sun exposure but the soils tend to be shallow and acidic. Erosion control practices are required on ridges and south-facing slopes to maintain productivity. Level and nearly level ground may be suitable for agriculture unless it is subject to frequent flooding or has a high water table. Some permafrost soils can be developed for agriculture but other permafrost soils may settle unevenly and be subject to thermokarst. The local offices of the Natural Resources Conservation Service or Alaska Cooperative Extension can provide guidance on the suitability of particular soils for crop production.

Subsistence

The Greater Fairbanks Area has a tradition of subsistence use of the native plant community. Harvesting of native plants for food, medicine, fiber, and fodder is an important land use. When developing land for agricultural production, consider managing a portion of the land for berry, birch bark or syrup production or as a wood lot. For more information about the use of native plants, consult local Alaska native groups, Alaska Cooperative Extension, or other ethnic organizations.

Land Clearing

The University of Alaska Cooperative Extension Service publication *Efficient Land Clearing Techniques* (Colla and Southwick, 1987), describes methods for clearing land. The Fairbanks Soil and Water Conservation District or the Natural Resources Conservation Service can assist farmers in developing a plan for bringing land into production. These offices can also provide information on appropriate land clearing and breaking techniques and the suitability of soils for specific crops. They can also provide referrals to federal, state, and local agencies for information on regulations affecting land clearing and removal of clearing debris.

Adapted Crops

Crops that will grow in cool climates with long summer days are best suited for this area. New crop varieties are released every year and changes in varieties, farming practices, and markets affect what crops are grown in the area. Historically grass hay has been a staple crop. Spring seeded small grains are grown for livestock feed and human consumption. Grass for seed, legumes such as field peas, and cool season vegetables have been successful crops. Potatoes for both seed and table are also grown and exported. Small fruits and specialty crops have potential for the area, particularly for niche markets. The Alaska Cooperative Extension can provide information and advice on suitable crop varieties and production techniques. The Alaska Division of Agriculture has information regarding marketing and production of agricultural products and the Alaska Agricultural Statistics Service can provide crop yield data and production trends.

Irrigation

Fairbanks has an average annual precipitation of only 10 to 13 inches (25 to 33 cm). Irrigation will improve crop growth and allow better use of the available plant nutrients. Vegetable crops are usually grown under irrigation. Potatoes have been grown under dryland conditions but yields are increased in some years by irrigation. Even grass hay yields can be improved with irrigation, particularly during establishment. The economic feasibility of irrigation, however, must be determined on a case by case basis. The Natural Resources Conservation Service and the Fairbanks Soil and Water Conservation

District can help farmers decide if irrigation is appropriate for their operation and what type of irrigation system best suits their needs.

Fertilizer Requirements

The soils of the Greater Fairbanks Area do not have enough natural fertility to sustain farm or garden crops without the addition of commercial or organic fertilizer. The Natural Resources Conservation Service recommends soil testing on a regular schedule to monitor the fertility of the soil. Soil analysis should include the macronutrients nitrogen, phosphorus, and potassium (N-P-K). Many soils in the area are also deficient in micronutrients. Many crops, for example, do better when boron is added to the soil. Micronutrients, however, can be toxic to plants if over applied. The Alaska Cooperative Extension makes fertilizer recommendations for farm and garden crops, lawns and landscaping plants.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location, as well as a discussion of their suitability, limitations, and management for specified uses. To characterize and map the soils, soil scientists dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The soil scientists also observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of native plants; and the kinds of geologic materials.

Before beginning the fieldwork, relevant information on the climate, geology, geomorphology, hydrology, and vegetation of the survey area was assembled. Aerial photography of the survey area was acquired and prepared for field use and mapping. Aerial photography taken in 1996 was enlarged to a scale of 1:24,000 for use during the survey fieldwork. Final compilation for the publication was done on 1:25,000 scale orthophotography.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept or model of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Detailed Soil Map Unit

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called non-contrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. 145—Minto-Chatanika complex, 0 to 3 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. There are no associations mapped in the Greater Fairbanks Area.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of

the major soils or miscellaneous areas, or it can be made up of all of them. 182—Typic Cryaquent, Histic Cryaquent and Terric Cryofibrist, is an example of an undifferentiated group.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. 109—Dumps, landfill, is an example.

Table 4 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

101—Bolio peat

Elevation: 423 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Bolio and Similar Soils

Extent: 70 to 85 percent of the map unit
Landform: depressions on terraces, flats on terraces
Slope shape: concave, linear
Slope range: 0 to 2 percent
Parent material: herbaceous organic material
Depth to permafrost: 14 to 28 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 5 inches
Ponding: frequent
Available water capacity (approximate): 3.5 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 12 inches; brown peat, high permeability
Oe—12 to 16 inches; very dark gray mucky peat, moderately high permeability
Of—16 to 72 inches; very dark grayish brown permanently frozen mucky peat, impermeable

Minor Components

Goldstream and similar soils: 0 to 10 percent of the map unit
Lemeta and similar soils: 5 to 15 percent of the map unit
Chatanika and similar soils: 0 to 5 percent of the map unit
Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

102—Bradway very fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Bradway and Similar Soils

Extent: 75 to 90 percent of the map unit
Landform: depressions
Slope shape: concave
Slope range: 0 to 2 percent
Parent material: alluvium
Depth to permafrost: 18 to 35 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: poorly drained
Flooding: occasional
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 4.5 inches
Vegetation: dwarf birch and willow scrub
Representative Profile:
Oi—0 to 7 inches; dark brown slightly decomposed plant material, high permeability
A—7 to 10 inches; dark grayish brown mucky silt loam, moderately high permeability
Cg—10 to 26 inches; gray stratified very fine sandy loam to fine sand, high permeability
Cfg—26 to 72 inches; dark brown permanently frozen material, impermeable

Minor Components

Mosquito and similar soils: 0 to 10 percent of the map unit
North Pole and similar soils: 0 to 10 percent of the map unit
Tanana and similar soils: 0 to 10 percent of the map unit

Noonku and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, ponding, flooding, frost action

103—Chatanika mucky silt loam, 0 to 3 percent slopes

Elevation: 423 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and Similar Soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 0 to 3 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
- Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high permeability
- A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high permeability
- C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high permeability
- Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Goldstream and similar soils: 5 to 15 percent of the map unit
Chatanika, slopes more than 3 percent, and similar soils: 5 to 10 percent of the map unit
Minto and similar soils: 3 to 7 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit
Histels and similar soils: 0 to 5 percent of the map unit
Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

104—Chatanika mucky silt loam, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and Similar Soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave
Slope range: 3 to 7 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
- Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high permeability
- A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high permeability
- C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high permeability
- Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Chatanika, slopes less than 3 percent, and similar soils: 0 to 5 percent of the map unit

Chatanika, slopes more than 7 percent, and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

105—Chatanika mucky silt loam, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and Similar Soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: concave, linear
Slope range: 7 to 12 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high permeability
A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high permeability
C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high permeability
Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Chatanika, slopes less than 7 percent, and similar soils: 0 to 5 percent of the map unit
Chatanika, slopes more than 12 percent, and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

106—Chatanika mucky silt loam, 12 to 20 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and Similar Soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave
Slope range: 12 to 20 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; grayish brown mottled slightly decomposed plant material, high permeability
A—4 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability
C/Ag—6 to 21 inches; grayish brown mottled silt loam, moderately high permeability
Cfg—21 to 72 inches; grayish brown mottled permanently frozen material, impermeable

Minor Components

Chatanika, slopes less than 12 percent, and similar soils: 0 to 10 percent of the map unit

Goldstream and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

107—Chatanika-Goldstream complex

Elevation: 423 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and Similar Soils

Extent: 50 to 60 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave
Slope range: 0 to 5 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; grayish brown mottled slightly decomposed plant material, high permeability
A—4 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability
C/Ag—6 to 21 inches; grayish brown mottled silt loam, moderately high permeability
Cfg—21 to 72 inches; grayish brown mottled permanently frozen material, impermeable

Goldstream and Similar Soils

Extent: 30 to 40 percent of the map unit
Landform: valley floors
Slope shape: concave, linear
Slope range: 0 to 5 percent
Parent material: organic material over loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; very dark grayish brown mucky peat, high permeability
A—9 to 12 inches; gray mucky silt loam, moderately high permeability
Bjjg—12 to 20 inches; dark brown silt loam, moderately high permeability
Cfg—20 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Minto and similar soils: 0 to 5 percent of the map unit
Chatanika, slopes more than 5 percent, and similar soils: 0 to 5 percent of the map unit
Histels and similar soils: 0 to 5 percent of the map unit
Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

108—Chena very fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chena and Similar Soils

Extent: 80 to 95 percent of the map unit
Landform: stream terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: excessively drained

Flooding: rare
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.5 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 4 inches; very dark gray slightly decomposed plant material, high permeability
C1—4 to 9 inches; olive brown stratified fine sand to silt loam, high permeability
2C2—9 to 72 inches; grayish brown very gravelly sand, high permeability
Note: This soil has 0 to 10 inches of loamy material over sand and gravel.

Minor Components

Jarvis and similar soils: 0 to 10 percent of the map unit
Noonku and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permeability, flooding, sand and gravel

109—Dumps, landfill

Elevation: 397 to 1,968 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Dumps, landfill

Extent: 100 percent of the map unit
Landform: sanitary landfills
Slope shape: linear, convex, concave
Slope range: 0 to 5 percent

110—Dumps, mine

Elevation: 397 to 1,968 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Dumps, mine

Extent: 100 percent of the map unit
Landform: spoil piles
Slope shape: concave, convex, linear
Slope range: 0 to 70 percent

Management Considerations

Soil-related factors: excess slope, large stones, permeability

111—Eielson fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Eielson and Similar Soils

Extent: 70 to 90 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 2 inches; very dark brown slightly decomposed plant material, high permeability
O/C—2 to 49 inches; dark grayish brown very fine sandy loam, moderately high permeability
C1—49 to 71 inches; olive brown and dark gray stratified silt loam to fine sand, moderately high permeability
2C2—71 to 72 inches; very dark brown very gravelly sand, high permeability
Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Peede and similar soils: 10 to 15 percent of the map unit
Tanana and similar soils: 0 to 15 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, frost action

112—Eielson-Piledriver complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Eielson and Similar Soils

Extent: 50 to 70 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 2 inches; dark grayish brown slightly decomposed plant material, high permeability
O/C—2 to 49 inches; very dark brown very fine sandy loam, moderately high permeability
C1—49 to 71 inches; olive brown and dark gray stratified silt loam to fine sand, moderately high permeability
2C2—71 to 72 inches; dark grayish brown very gravelly sand, high permeability
Note: This soil has more than 40 inches of loamy material over sand and gravel.

Piledriver and Similar Soils

Extent: 25 to 40 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 7.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability
C1—3 to 15 inches; dark olive brown very fine sandy loam, moderately high permeability
C2—15 to 33 inches; grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability
2C3—33 to 72 inches; light olive brown and grayish brown very gravelly sand, high permeability
Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Fubar and similar soils: 0 to 5 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit
Salchaket and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action

113—Eielson-Tanana complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Eielson and Similar Soils

Extent: 30 to 60 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest

Representative Profile:
Oi—0 to 2 inches; olive brown and dark gray slightly decomposed plant material, high permeability
O/C—2 to 49 inches; dark grayish brown very fine sandy loam, moderately high permeability
C1—49 to 71 inches; very dark brown stratified silt loam to fine sand, moderately high permeability
2C2—71 to 72 inches; olive brown and dark gray very gravelly sand, high permeability
Note: This soil has more than 40 inches of loamy material over sand and gravel.

Tanana and Similar Soils

Extent: 20 to 50 percent of the map unit
Landform: terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium and/or loess over alluvium
Depth to permafrost: 16 to 47 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—6 to 12 inches
Ponding: frequent
Available water capacity (approximate): 5.2 inches
Vegetation: white spruce, black spruce, and paper birch forest
Representative Profile:
Oi—0 to 3 inches; dark grayish brown slightly decomposed plant material, high permeability
A—3 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability
Bjjg—6 to 25 inches; very dark brown very fine sandy loam, moderately high permeability
Cjjfg—25 to 72 inches; dark grayish brown permanently frozen material, impermeable

Minor Components

Peede and similar soils: 10 to 15 percent of the map unit
Tanacross and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, flooding, frost action

114—Ester peat, 20 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Ester and Similar Soils

Extent: 65 to 75 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear
Slope range: 20 to 45 percent
Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist
Depth to permafrost: 7 to 30 inches
Depth to bedrock (paralithic): 14 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—4 inches
Ponding: none
Available water capacity (approximate): 1.3 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; olive brown peat, high permeability
ABjjf—9 to 12 inches; black permanently frozen mucky silt loam, moderately high permeability
2Cjjf—12 to 21 inches; dark reddish brown permanently frozen very channery silt loam, impermeable
2Crf—21 to 72 inches; olive brown permanently frozen weathered bedrock

Minor Components

Brigadier and similar soils: 0 to 5 percent of the map unit
Ester, rolling, and similar soils: 0 to 10 percent of the map unit
Ester, very steep, and similar soils: 0 to 5 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, excess slope, water table, bedrock

115—Ester peat, very steep

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Ester and Similar Soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear
Slope range: 45 to 70 percent
Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist
Depth to permafrost: 7 to 30 inches
Depth to bedrock (paralithic): 14 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—4 inches
Ponding: none
Available water capacity (approximate): 1.3 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; black peat, high permeability
ABjjf—9 to 12 inches; dark reddish brown permanently frozen mucky silt loam, moderately high permeability
2Cjjf—12 to 21 inches; olive brown permanently frozen very channery silt loam, impermeable
2Crf—21 to 72 inches; black permanently frozen weathered bedrock

Minor Components

Brigadier and similar soils: 5 to 10 percent of the map unit
Ester, slopes less than 45 percent, and similar soils: 5 to 10 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, excess slope, water table, bedrock

116—Fairbanks silt loam, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 3 to 7 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability
A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability
C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Minor Components

Minto and similar soils: 5 to 12 percent of the map unit
Fairbanks, slopes less than 3 percent, and similar soils: 2 to 10 percent of the map unit
Fairbanks, slopes more than 7 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: frost action

117—Fairbanks silt loam, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 75 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 7 to 12 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; light olive brown slightly decomposed plant material, high permeability
A,Bw—3 to 30 inches; grayish brown or light olive brown silt loam, moderately high permeability
C—30 to 72 inches; light olive brown silt loam, moderately high permeability

Minor Components

Fairbanks, slopes more than 12 percent, and similar soils: 0 to 15 percent of the map unit
Fairbanks, slopes less than 7 percent, and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

118—Fairbanks silt loam, 12 to 20 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 65 to 80 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Representative Profile:
Oi—0 to 3 inches; light olive brown slightly decomposed plant material, high permeability
A,Bw—3 to 30 inches; grayish brown or light olive brown silt loam, moderately high permeability
C—30 to 72 inches; light olive brown silt loam, moderately high permeability

Minor Components

Fairbanks, slopes less than 12 percent, and similar soils: 0 to 15 percent of the map unit
Fairbanks, slopes more than 20 percent, and similar soils: 0 to 15 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

119—Fairbanks silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 75 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 20 to 30 percent

Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability
A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability
C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Minor Components

Fairbanks, slopes less than 20 percent, and similar soils: 0 to 15 percent of the map unit
Fairbanks, slopes more than 30 percent, and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

120—Fairbanks silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 80 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 30 to 45 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; light olive brown slightly decomposed plant material, high permeability
A,Bw—3 to 30 inches; grayish brown or light olive brown silt loam, moderately high permeability
C—30 to 72 inches; light olive brown silt loam, moderately high permeability

Minor Components

Fairbanks, slopes less than 30 percent, and similar soils: 0 to 5 percent of the map unit
Fairbanks, slopes more than 45 percent, and similar soils: 0 to 15 percent of the map unit
Steese and similar soils: 0 to 15 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

121—Fairbanks silt loams, strongly sloping and steep

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks, strongly sloping, and Similar Soils

Extent: 55 to 65 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 7 to 15 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none

Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability
A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability
C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Fairbanks, steep, and Similar Soils

Extent: 25 to 35 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 30 to 55 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability
A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability
C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Minor Components

Minto and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

122—Fairbanks-Steese complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 50 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability
A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability
C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Steese and Similar Soils

Extent: 25 to 40 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none

Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; light olive brown slightly decomposed plant material, high permeability
A—2 to 5 inches; dark brown silt loam, moderately high permeability
Bw—5 to 27 inches; brown silt loam, moderately high permeability
2C—27 to 33 inches; light olive brown very channery silt loam, high permeability
2Cr—33 to 72 inches; light olive brown weathered bedrock

Minor Components

Fairbanks, slopes less than 12 percent, and similar soils: 2 to 7 percent of the map unit
Fairbanks, slopes more than 20 percent, and similar soils: 2 to 7 percent of the map unit
Steese, slopes more than 20 percent, and similar soils: 2 to 5 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Steese, slopes less than 12 percent, and similar soils: 2 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

123—Fairbanks-Steese complex, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and Similar Soils

Extent: 30 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 20 to 30 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability
A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability
C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Steese and Similar Soils

Extent: 15 to 50 percent of the map unit
Landform: hills
Position on slope: backslopes, shoulders
Slope shape: convex, linear
Slope range: 20 to 30 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
A—2 to 5 inches; light olive brown silt loam, moderately high permeability
Bw—5 to 27 inches; dark brown silt loam, moderately high permeability
2C—27 to 33 inches; brown very channery silt loam, high permeability
2Cr—33 to 72 inches; brown weathered bedrock

Minor Components

Fairbanks, slopes less than 20 percent, and similar soils: 3 to 12 percent of the map unit
Steese, slopes less than 20 percent, and similar soils: 3 to 12 percent of the map unit

Gilmore and similar soils: 0 to 5 percent of the map unit
Steese, slopes more than 30 percent, and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

124—Fubar-Piledriver complex, occasionally flooded

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fubar and Similar Soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: moderately well drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—54 inches
Ponding: none
Available water capacity (approximate): 3.4 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:
Oi—0 to 2 inches; dark grayish brown slightly decomposed plant material, high permeability
C1—2 to 10 inches; dark gray stratified fine sand to silt loam, moderately high permeability
2C2—10 to 72 inches; dark brown very gravelly coarse sand, high permeability
Note: This soil has 1 to 10 inches of loamy material over sand and gravel.

Piledriver and Similar Soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 7.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 3 inches; dark olive brown slightly decomposed plant material, high permeability
C1—3 to 15 inches; dark brown very fine sandy loam, moderately high permeability
C2—15 to 33 inches; light olive brown and grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability
2C3—33 to 72 inches; grayish brown very gravelly sand, high permeability
Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Eielson and similar soils: 0 to 5 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit
North Pole and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, permeability, sand and gravel

125—Gilmore silt loam, 3 to 7 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 70 to 90 percent of the map unit
Landform: hills
Position on slope: summits, backslopes
Slope shape: linear, convex
Slope range: 3 to 7 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; yellowish brown slightly decomposed plant material, high permeability
A—3 to 6 inches; dark brown silt loam, moderately high permeability
Bw—6 to 12 inches; olive brown silt loam, moderately high permeability
2BC—12 to 19 inches; yellowish brown very channery silt loam, high permeability
2Cr—19 to 72 inches; yellowish brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 3 percent, and similar soils: 5 to 10 percent of the map unit
Gilmore, slopes more than 7 percent, and similar soils: 2 to 10 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: bedrock

126—Gilmore silt loam, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 65 to 75 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 7 to 12 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability
A—3 to 6 inches; yellowish brown silt loam, moderately high permeability
Bw—6 to 12 inches; olive brown silt loam, moderately high permeability
2BC—12 to 19 inches; dark brown very channery silt loam, high permeability
2Cr—19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes more than 12 percent, and similar soils: 10 to 15 percent of the map unit
Gilmore, slopes less than 7 percent, and similar soils: 5 to 10 percent of the map unit
Steese and similar soils: 5 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

127—Gilmore silt loam, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: summits, backslopes
Slope shape: linear, convex
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; yellowish brown slightly decomposed plant material, high permeability
A—3 to 6 inches; olive brown silt loam, moderately high permeability
Bw—6 to 12 inches; dark brown silt loam, moderately high permeability
2BC—12 to 19 inches; yellowish brown very channery silt loam, high permeability
2Cr—19 to 72 inches; yellowish brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 12 percent, and similar soils: 5 to 12 percent of the map unit
Gilmore, slopes more than 20 percent, and similar soils: 10 to 15 percent of the map unit
Steese and similar soils: 5 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

128—Gilmore silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 60 to 80 percent of the map unit
Landform: hills
Position on slope: summits, backslopes
Slope shape: linear, convex
Slope range: 20 to 30 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability
A—3 to 6 inches; yellowish brown silt loam, moderately high permeability
Bw—6 to 12 inches; olive brown silt loam, moderately high permeability
2BC—12 to 19 inches; dark brown very channery silt loam, high permeability
2Cr—19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 20 percent, and similar soils: 5 to 15 percent of the map unit
Steese and similar soils: 5 to 15 percent of the map unit
Gilmore, slopes more than 30 percent, and similar soils: 0 to 5 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

129—Gilmore silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 80 to 90 percent of the map unit
Landform: hills
Position on slope: summits, backslopes
Slope shape: linear, convex
Slope range: 30 to 45 percent
Parent material: loess over residuum weathered from schist

Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability
A—3 to 6 inches; yellowish brown silt loam, moderately high permeability
Bw—6 to 12 inches; olive brown silt loam, moderately high permeability
2BC—12 to 19 inches; dark brown very channery silt loam, high permeability
2Cr—19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 30 percent, and similar soils: 5 to 10 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit
Rock outcrop: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

130—Gilmore silt loam, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 80 to 90 percent of the map unit
Landform: hills
Position on slope: summits, backslopes
Slope shape: convex, linear
Slope range: 45 to 70 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; yellowish brown slightly decomposed plant material, high permeability
A—3 to 6 inches; dark brown silt loam, moderately high permeability
Bw—6 to 12 inches; olive brown silt loam, moderately high permeability
2BC—12 to 19 inches; yellowish brown very channery silt loam, high permeability
2Cr—19 to 72 inches; yellowish brown weathered bedrock, high permeability

Minor Components

Ester and similar soils: 0 to 10 percent of the map unit
Gilmore, slopes less than 45 percent, and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit
Rock outcrop: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

131—Gilmore-Ester complex, 12 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 35 to 55 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist

Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; olive brown slightly decomposed plant material, high permeability
A—3 to 6 inches; dark brown silt loam, moderately high permeability
Bw—6 to 12 inches; yellowish brown silt loam, moderately high permeability
2BC—12 to 19 inches; olive brown very channery silt loam, high permeability
2Cr—19 to 72 inches; olive brown weathered bedrock, high permeability

Ester and Similar Soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear
Slope range: 20 to 70 percent
Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist
Depth to permafrost: 7 to 30 inches
Depth to bedrock (paralithic): 14 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—4 inches
Ponding: none
Available water capacity (approximate): 1.3 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; olive brown peat, high permeability
ABjjf—9 to 12 inches; black permanently frozen mucky silt loam, moderately high permeability
2Cjjf—12 to 21 inches; dark reddish brown permanently frozen very channery silt loam, impermeable
2Crf—21 to 72 inches; olive brown permanently frozen weathered bedrock

Minor Components

Brigadier and similar soils: 7 to 15 percent of the map unit
Steese and similar soils: 0 to 7 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, excess slope, water table, bedrock

132—Gilmore-Steese complex, 3 to 15 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and Similar Soils

Extent: 60 to 70 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: convex, linear
Slope range: 3 to 15 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; yellowish brown slightly decomposed plant material, high permeability
A—3 to 6 inches; olive brown silt loam, moderately high permeability
Bw—6 to 12 inches; dark brown silt loam, moderately high permeability

2BC—12 to 19 inches; yellowish brown very channery silt loam, high permeability
2Cr—19 to 72 inches; yellowish brown weathered bedrock, high permeability

Steese and Similar Soils

Extent: 30 to 40 percent of the map unit
Landform: hills
Position on slope: backslopes, shoulders
Slope shape: convex, linear
Slope range: 3 to 15 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; dark brown slightly decomposed plant material, high permeability
A—2 to 5 inches; brown silt loam, moderately high permeability
Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability
2C—27 to 33 inches; dark brown very channery silt loam, high permeability
2Cr—33 to 72 inches; dark brown weathered bedrock

Minor Components

Steese, slopes more than 15 percent, and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

133—Goldstream peat, 0 to 3 percent slopes

Elevation: 397 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Goldstream and Similar Soils

Extent: 70 to 85 percent of the map unit
Landform: valley floors
Slope shape: concave, linear
Slope range: 0 to 3 percent
Parent material: organic material over loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; gray mucky peat, high permeability
A—9 to 12 inches; dark brown mucky silt loam, moderately high permeability
Bjjg—12 to 20 inches; very dark grayish brown silt loam, moderately high permeability
Cfg—20 to 72 inches; gray permanently frozen material, impermeable

Minor Components

Chatanika and similar soils: 5 to 15 percent of the map unit
Histels and similar soils: 0 to 5 percent of the map unit
Goldstream, slopes more than 3 percent, and similar soils: 0 to 5 percent of the map unit
Typic Cryaquents and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

134—Goldstream peat, 3 to 7 percent slopes

Elevation: 397 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Goldstream and Similar Soils

Extent: 80 to 85 percent of the map unit
Landform: valley floors
Slope shape: concave, linear
Slope range: 3 to 7 percent
Parent material: organic material over loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; dark brown mucky peat, high permeability
A—9 to 12 inches; very dark grayish brown mucky silt loam, moderately high permeability
Bjjg—12 to 20 inches; gray silt loam, moderately high permeability
Cfg—20 to 72 inches; dark brown permanently frozen material, impermeable

Minor Components

Chatanika and similar soils: 0 to 15 percent of the map unit
Histels and similar soils: 0 to 7 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit
Typic Cryaquents and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

135—Goldstream-Histels complex, 0 to 3 percent slopes

Elevation: 397 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Goldstream and Similar Soils

Extent: 40 to 60 percent of the map unit
Landform: valley floors
Slope shape: concave, linear
Slope range: 0 to 3 percent
Parent material: organic material over loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Representative Profile:
Oi—0 to 9 inches; dark brown mucky peat, high permeability
A—9 to 12 inches; very dark grayish brown mucky silt loam, moderately high permeability
Bjjg—12 to 20 inches; gray silt loam, moderately high permeability
Cfg—20 to 72 inches; dark brown permanently frozen material, impermeable

Histels and Similar Soils

Extent: 45 to 50 percent of the map unit
Landform: depressions on terraces, flats on terraces
Slope shape: concave
Slope range: 0 to 3 percent
Parent material: organic material over alluvium and/or loess
Depth to permafrost: 16 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 3.9 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 12 inches; black peat, high permeability
Oe—12 to 17 inches; brown mucky peat, moderately high permeability
Oef—17 to 26 inches; very dark gray permanently frozen mucky peat, impermeable
Cfg—26 to 72 inches; black permanently frozen material, impermeable

Minor Components

Terric Cryofibrists and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

136—Histels

Elevation: 423 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Histels and Similar Soils

Extent: 85 to 90 percent of the map unit
Landform: depressions on terraces, flats on terraces
Slope shape: concave
Slope range: 0 to 3 percent
Parent material: organic material over alluvium and/or loess
Depth to permafrost: 16 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 3.9 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 12 inches; very dark gray peat, high permeability
Oe—12 to 17 inches; brown mucky peat, moderately high permeability
Oef—17 to 26 inches; black permanently frozen mucky peat, impermeable
Cfg—26 to 72 inches; very dark gray permanently frozen material, impermeable

Minor Components

Goldstream and similar soils: 10 to 15 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

137—Jarvis fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Jarvis and Similar Soils

Extent: 70 to 80 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—more than 72 inches
Ponding: occasional
Available water capacity (approximate): 5.9 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:
Oe—0 to 3 inches; grayish brown moderately decomposed plant material, high permeability
C1—3 to 6 inches; olive brown very fine sandy loam, moderately high permeability
C2—6 to 24 inches; black stratified sand to fine sand to very fine sandy loam, moderately high permeability
2C3—24 to 72 inches; gray very gravelly sand, high permeability
Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Salchaket and similar soils: 5 to 15 percent of the map unit
Chena and similar soils: 0 to 5 percent of the map unit
Noonku and similar soils: 0 to 10 percent of the map unit
Tanana and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permeability, flooding, ponding, sand and gravel

138—Jarvis-Chena complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Jarvis and Similar Soils

Extent: 50 to 60 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—more than 72 inches
Ponding: occasional
Available water capacity (approximate): 5.9 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:
Oe—0 to 3 inches; grayish brown moderately decomposed plant material, high permeability
C1—3 to 6 inches; olive brown very fine sandy loam, moderately high permeability
C2—6 to 24 inches; black stratified sand to fine sand to very fine sandy loam, moderately high permeability
2C3—24 to 72 inches; gray very gravelly sand, high permeability
Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Chena and Similar Soils

Extent: 30 to 40 percent of the map unit
Landform: stream terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: excessively drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.5 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 4 inches; grayish brown slightly decomposed plant material, high permeability
C1—4 to 9 inches; olive brown stratified fine sand to silt loam, high permeability
2C2—9 to 72 inches; very dark gray very gravelly sand, high permeability
Note: This soil has 0 to 10 inches of loamy material over sand and gravel.

Minor Components

Noonku and similar soils: 0 to 10 percent of the map unit
Salchaket and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permeability, flooding, ponding, sand and gravel

139—Jarvis-Salchaket complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Jarvis and Similar Soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—more than 72 inches
Ponding: occasional
Available water capacity (approximate): 5.9 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:
Oe—0 to 3 inches; black moderately decomposed plant material, high permeability
C1—3 to 6 inches; olive brown very fine sandy loam, moderately high permeability
C2—6 to 24 inches; grayish brown stratified sand to fine sand to very fine sandy loam,

moderately high permeability
2C3—24 to 72 inches; gray very gravelly sand, high permeability
Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Salchaket and Similar Soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—more than 72 inches
Ponding: frequent
Available water capacity (approximate): 9.7 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:
Oi—0 to 3 inches; variegated slightly decomposed plant material, high permeability
C1—3 to 24 inches; dark brown very fine sandy loam, moderately high permeability
C2—24 to 45 inches; olive brown stratified silt loam to fine sand, moderately high permeability
2C3—45 to 72 inches; dark grayish brown very gravelly sand, high permeability
Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Tanana and similar soils: 0 to 5 percent of the map unit
Chena and similar soils: 0 to 5 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit

North Pole and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permeability, flooding, ponding

140—Lemeta peat

Elevation: 423 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Lemeta and Similar Soils

Extent: 70 to 80 percent of the map unit
Landform: fens on terraces
Slope shape: concave, linear
Slope range: 0 to 1 percent
Parent material: mossy organic material over herbaceous organic material
Depth to permafrost: 15 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 3.0 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 20 inches; yellowish brown peat, high permeability
Oef—20 to 72 inches; very dark brown permanently frozen mucky peat, impermeable

Minor Components

Bolio and similar soils: 0 to 10 percent of the map unit
Goldstream and similar soils: 5 to 15 percent of the map unit
Chatanika and similar soils: 0 to 5 percent of the map unit
Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

141—Liscum-Noonku complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Liscum and Similar Soils

Extent: 45 to 55 percent of the map unit
Landform: alluvial flats
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 4 inches
Ponding: frequent
Available water capacity (approximate): 11.9 inches
Vegetation: sedges and grasses
Representative Profile:
Oi—0 to 3 inches; black peat, high permeability
Oa—3 to 11 inches; very dark grayish brown muck, moderately low permeability
A—11 to 15 inches; dark brown mucky silt loam, moderately high permeability
Bg—15 to 70 inches; olive brown and gray stratified silt loam to loamy fine sand, moderately high permeability
C—70 to 72 inches; olive brown very gravelly sandy loam, high permeability
Note: This soil has more than 40 inches of loamy material over sand and gravel.

Noonku and Similar Soils

Extent: 35 to 50 percent of the map unit
Landform: sloughs
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: very poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 9.2 inches
Vegetation: alder, willow, and bog birch scrub
Representative Profile:
Oe—0 to 2 inches; gray moderately decomposed plant material, moderately high permeability
A—2 to 6 inches; dark brown silt loam, moderately high permeability
Cg1—6 to 47 inches; very dark brown stratified sand to fine sand to very fine sandy loam, moderately high permeability
2Cg2—47 to 72 inches; gray very gravelly sand, high permeability

Minor Components

North Pole and similar soils: 0 to 7 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, frost action

142—Minto silt loam, 0 to 3 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 0 to 3 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; very dark grayish brown slightly decomposed plant material, high permeability
A—5 to 9 inches; grayish brown silt loam, moderately high permeability
Bw—9 to 16 inches; light olive brown silt loam, moderately high permeability
C—16 to 72 inches; dark brown silt loam, moderately high permeability
Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Chatanika and similar soils: 5 to 10 percent of the map unit
Fairbanks and similar soils: 0 to 10 percent of the map unit
Minto, slopes more than 3 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: thermokarst, frost action

143—Minto silt loam, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 60 to 80 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave, convex
Slope range: 3 to 7 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; dark brown slightly decomposed plant material, high permeability
A—5 to 9 inches; very dark grayish brown silt loam, moderately high permeability
Bw—9 to 16 inches; light olive brown silt loam, moderately high permeability
C—16 to 72 inches; grayish brown silt loam, moderately high permeability
Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Chatanika and similar soils: 10 to 15 percent of the map unit
Minto, slopes more than 7 percent, and similar soils: 5 to 10 percent of the map unit
Fairbanks and similar soils: 0 to 10 percent of the map unit
Minto, slopes less than 3 percent, and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: thermokarst, frost action

144—Minto silt loam, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 50 to 70 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: concave, linear, convex
Slope range: 7 to 12 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; grayish brown slightly decomposed plant material, high permeability
A—5 to 9 inches; light olive brown silt loam, moderately high permeability
Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high permeability
C—16 to 72 inches; dark brown silt loam, moderately high permeability
Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Chatanika and similar soils: 5 to 15 percent of the map unit
Minto, slopes less than 7 percent, and similar soils: 5 to 15 percent of the map unit

Minto, slopes more than 12 percent, and similar soils: 5 to 15 percent of the map unit
Fairbanks and similar soils: 5 to 15 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: thermokarst, frost action, excess slope

145—Minto-Chatanika complex, 0 to 3 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 35 to 50 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave, convex
Slope range: 0 to 3 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; grayish brown slightly decomposed plant material, high permeability
A—5 to 9 inches; dark brown silt loam, moderately high permeability
Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high permeability
C—16 to 72 inches; light olive brown silt loam, moderately high permeability
Note: Permafrost is usually present at some depth below the soil profile.

Chatanika and Similar Soils

Extent: 35 to 50 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave
Slope range: 0 to 3 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; grayish brown mottled slightly decomposed plant material, high permeability
A—4 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability
C/Ag—6 to 21 inches; grayish brown mottled silt loam, moderately high permeability
Cfg—21 to 72 inches; grayish brown mottled permanently frozen material, impermeable

Minor Components

Chatanika, slopes more than 3 percent, and similar soils: 2 to 10 percent of the map unit
Goldstream and similar soils: 2 to 10 percent of the map unit
Minto, slopes more than 3 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

146—Minto-Chatanika complex, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 30 to 40 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 3 to 7 percent

Parent material: loess
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; light olive brown slightly decomposed plant material, high permeability
A—5 to 9 inches; grayish brown silt loam, moderately high permeability
Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high permeability
C—16 to 72 inches; dark brown silt loam, moderately high permeability
Note: Permafrost is usually present at some depth below the soil profile.

Chatanika and Similar Soils

Extent: 30 to 40 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 3 to 7 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high permeability
A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high permeability
C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high permeability
Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Minto, slopes less than 3 percent, and similar soils: 5 to 10 percent of the map unit
Minto, slopes more than 7 percent, and similar soils: 5 to 10 percent of the map unit
Saulich and similar soils: 0 to 10 percent of the map unit
Chatanika, slopes less than 3 percent, and similar soils: 0 to 5 percent of the map unit
Chatanika, slopes more than 7 percent, and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

147—Minto-Chatanika complex, 7 to 12 percent slopes

Elevation: 397 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave, convex
Slope range: 7 to 12 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; dark brown slightly decomposed plant material, high permeability
A—5 to 9 inches; very dark grayish brown silt loam, moderately high permeability

Bw—9 to 16 inches; grayish brown silt loam, moderately high permeability
C—16 to 72 inches; light olive brown silt loam, moderately high permeability
Note: Permafrost is usually present at some depth below the soil profile.

Chatanika and Similar Soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 7 to 12 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high permeability
A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high permeability
C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high permeability
Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Minto, slopes more than 12 percent, and similar soils: 5 to 15 percent of the map unit
Chatanika, slopes less than 7 percent, and similar soils: 2 to 10 percent of the map unit
Typic Cryaquents and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

148—Minto-Chatanika complex, 12 to 20 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and Similar Soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 12 to 20 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; very dark grayish brown slightly decomposed plant material, high permeability
A—5 to 9 inches; grayish brown silt loam, moderately high permeability
Bw—9 to 16 inches; light olive brown silt loam, moderately high permeability
C—16 to 72 inches; dark brown silt loam, moderately high permeability
Note: Permafrost is usually present at some depth below the soil profile.

Chatanika and Similar Soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 12 to 20 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high

Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; grayish brown mottled slightly decomposed plant material, high permeability
A—4 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability
C/Ag—6 to 21 inches; grayish brown mottled silt loam, moderately high permeability
Cfg—21 to 72 inches; grayish brown mottled permanently frozen material, impermeable

Minor Components

Minto, slopes more than 20 percent, and similar soils: 5 to 15 percent of the map unit
Chatanika, slopes less than 12 percent, and similar soils: 2 to 10 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, excess slope

149—Mosquito mucky peat

Elevation: 397 to 951 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Mosquito and Similar Soils

Extent: 70 to 90 percent of the map unit
Landform: depressions on alluvial flats
Slope shape: linear, concave
Slope range: 0 to 2 percent
Parent material: organic material over alluvium
Depth to permafrost: 14 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 4.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 18 inches; dark grayish brown peat, high permeability
Cg—18 to 24 inches; black very fine sandy loam, moderately high permeability
Cfg—24 to 72 inches; dark grayish brown permanently frozen material, impermeable

Minor Components

Bolio and similar soils: 0 to 10 percent of the map unit
Bradway and similar soils: 0 to 10 percent of the map unit
Liscum and similar soils: 0 to 5 percent of the map unit
Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, flooding, frost action

150—Mosquito-Noonku complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Mosquito and Similar Soils

Extent: 30 to 50 percent of the map unit
Landform: depressions on alluvial flats
Slope shape: linear, concave
Slope range: 0 to 2 percent
Parent material: organic material over alluvium
Depth to permafrost: 14 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 4.1 inches
Representative Profile:
Oi—0 to 18 inches; black peat, high permeability
Cg—18 to 24 inches; dark grayish brown very fine sandy loam, moderately high permeability
Cfg—24 to 72 inches; black permanently frozen material, impermeable

Noonku and Similar Soils

Extent: 30 to 50 percent of the map unit
Landform: sloughs
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: very poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 9.2 inches
Vegetation: alder, willow, and bog birch scrub
Representative Profile:
Oe—0 to 2 inches; very dark brown moderately decomposed plant material, moderately high permeability
A—2 to 6 inches; dark brown silt loam, moderately high permeability
Cg1—6 to 47 inches; gray stratified sand to fine sand to very fine sandy loam, moderately high permeability
2Cg2—47 to 72 inches; very dark brown very gravelly sand, high permeability

Minor Components

Bradway and similar soils: 0 to 10 percent of the map unit
North Pole and similar soils: 0 to 10 percent of the map unit
Tanana and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, flooding, frost action

151—Noonku very fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Noonku and Similar Soils

Extent: 75 to 85 percent of the map unit
Landform: sloughs
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: very poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 9.2 inches
Vegetation: alder, willow, and bog birch scrub
Representative Profile:
Oe—0 to 2 inches; dark brown moderately decomposed plant material, moderately high permeability
A—2 to 6 inches; very dark brown silt loam, moderately high permeability
Cg1—6 to 47 inches; gray stratified sand to fine sand to very fine sandy loam, moderately high permeability
2Cg2—47 to 72 inches; dark brown very gravelly sand, high permeability

Minor Components

Liscum and similar soils: 0 to 5 percent of the map unit
North Pole and similar soils: 0 to 10 percent of the map unit
Tanacross and similar soils: 0 to 5 percent of the map unit
Tanana and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, frost action

152—North Pole fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

North Pole and Similar Soils

Extent: 75 to 90 percent of the map unit
Landform: alluvial flats
Slope shape: linear
Slope range: 0 to 2 percent

Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 8.2 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 2 inches; dark brown slightly decomposed plant material, high permeability
Oa—2 to 4 inches; grayish brown highly decomposed plant material, moderately low permeability
Bg—4 to 39 inches; black stratified fine sand to silt loam, moderately high permeability
2C—39 to 72 inches; dark yellowish brown and dark gray very gravelly sand, high permeability
Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Tanana and similar soils: 0 to 10 percent of the map unit
Mosquito and similar soils: 0 to 10 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit
Eielson and similar soils: 0 to 5 percent of the map unit
Liscum and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action

153—North Pole-Mosquito-Liscum complex

Elevation: 397 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

North Pole and Similar Soils

Extent: 20 to 55 percent of the map unit
Landform: alluvial flats
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 8.2 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 2 inches; dark yellowish brown and dark gray slightly decomposed plant material, high permeability
Oa—2 to 4 inches; black highly decomposed plant material, moderately low permeability
Bg—4 to 39 inches; dark brown stratified fine sand to silt loam, moderately high permeability
2C—39 to 72 inches; grayish brown very gravelly sand, high permeability
Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Mosquito and Similar Soils

Extent: 20 to 40 percent of the map unit
Landform: depressions on alluvial flats
Slope shape: linear, concave
Slope range: 0 to 2 percent
Parent material: organic material over alluvium
Depth to permafrost: 14 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 4.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 18 inches; black peat, high permeability
Cg—18 to 24 inches; dark grayish brown very fine sandy loam, moderately high permeability
Cfg—24 to 72 inches; black permanently frozen material, impermeable

Liscum and Similar Soils

Extent: 15 to 25 percent of the map unit

Landform: alluvial flats
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 4 inches
Ponding: frequent
Available water capacity (approximate): 11.9 inches
Vegetation: sedges and grasses
Representative Profile:
Oi—0 to 3 inches; olive brown and gray peat, high permeability
Oa—3 to 11 inches; olive brown muck, moderately low permeability
A—11 to 15 inches; very dark grayish brown mucky silt loam, moderately high permeability
Bg—15 to 70 inches; black stratified silt loam to loamy fine sand, moderately high permeability
C—70 to 72 inches; dark brown gravelly sandy loam, high permeability
Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Histels and similar soils: 0 to 10 percent of the map unit
Typic Cryaquents and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action, permafrost

154—North Pole-Noonku complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

North Pole and Similar Soils

Extent: 50 to 65 percent of the map unit
Landform: alluvial flats
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 8.2 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 2 inches; grayish brown slightly decomposed plant material, high permeability
Oa—2 to 4 inches; dark yellowish brown and dark gray highly decomposed plant material, moderately low permeability
Bg—4 to 39 inches; black stratified fine sand to silt loam, moderately high permeability
2C—39 to 72 inches; dark brown very gravelly sand, high permeability
Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Noonku and Similar Soils

Extent: 15 to 35 percent of the map unit
Landform: sloughs
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: very poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 9.2 inches
Vegetation: alder, willow, and bog birch scrub
Representative Profile:
Oe—0 to 2 inches; gray moderately decomposed plant material, moderately high permeability
A—2 to 6 inches; dark brown silt loam, moderately high permeability
Cg1—6 to 47 inches; very dark brown stratified sand to fine sand to very fine sandy loam, moderately high permeability
2Cg2—47 to 72 inches; gray very gravelly sand, high permeability

Minor Components

Bradway and similar soils: 0 to 10 percent of the map unit

Eielson and similar soils: 0 to 5 percent of the map unit
Piledriver and similar soils: 0 to 5 percent of the map unit
Tanana and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action

155—Peede silt loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Peede and Similar Soils

Extent: 60 to 90 percent of the map unit
Landform: depressions on flood plains
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 14.6 inches
Vegetation: grasses and sedges
Representative Profile:
Oe—0 to 2 inches; very dark brown moderately decomposed plant material, moderately high permeability
Cg—2 to 72 inches; dark gray silt loam, moderately high permeability

Minor Components

Mosquito and similar soils: 5 to 25 percent of the map unit
Liscum and similar soils: 0 to 15 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, frost action

156—Peede-Mosquito complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Peede and Similar Soils

Extent: 60 to 80 percent of the map unit
Landform: depressions on flood plains
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 14.6 inches
Vegetation: grasses and sedges
Representative Profile:
Oe—0 to 2 inches; dark gray moderately decomposed plant material, moderately high permeability
Cg—2 to 72 inches; very dark brown silt loam, moderately high permeability

Mosquito and Similar Soils

Extent: 20 to 30 percent of the map unit
Landform: depressions on alluvial flats
Slope shape: linear, concave
Slope range: 0 to 2 percent
Parent material: organic material over alluvium
Depth to permafrost: 14 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 4.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 18 inches; dark grayish brown peat, high permeability
Cg—18 to 24 inches; black very fine sandy loam, moderately high permeability
Cfg—24 to 72 inches; dark grayish brown

permanently frozen material, impermeable

Minor Components

Liscum and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, permafrost, frost action

157—Piledriver very fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Piledriver and Similar Soils

Extent: 70 to 90 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 7.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 3 inches; dark olive brown slightly decomposed plant material, high permeability
C1—3 to 15 inches; dark brown very fine sandy loam, moderately high permeability
C2—15 to 33 inches; grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability
2C3—33 to 72 inches; light olive brown and grayish brown very gravelly sand, high permeability
Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Eielson and similar soils: 5 to 15 percent of the map unit
Fubar and similar soils: 5 to 10 percent of the map unit
Tanana and similar soils: 0 to 5 percent of the map unit
North Pole and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, permeability, flooding

158—Piledriver-Eielson complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Piledriver and Similar Soils

Extent: 45 to 60 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 7.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability
C1—3 to 15 inches; dark olive brown very fine sandy loam, moderately high permeability
C2—15 to 33 inches; light olive brown and grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability
2C3—33 to 72 inches; grayish brown very gravelly sand, high permeability
Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Eielson and Similar Soils

Extent: 30 to 40 percent of the map unit
Landform: flood plains

Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 2 inches; very dark brown slightly decomposed plant material, high permeability
O/C—2 to 49 inches; dark grayish brown very fine sandy loam, moderately high permeability
C1—49 to 71 inches; olive brown and dark gray stratified silt loam to fine sand, moderately high permeability
2C2—71 to 72 inches; very dark brown very gravelly sand, high permeability
Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Fubar and similar soils: 0 to 10 percent of the map unit
Noonku and similar soils: 0 to 10 percent of the map unit
Riverwash: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action

159—Piledriver-Fubar complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Piledriver and Similar Soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 7.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 3 inches; dark olive brown slightly decomposed plant material, high permeability
C1—3 to 15 inches; dark brown very fine sandy loam, moderately high permeability
C2—15 to 33 inches; light olive brown and grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability
2C3—33 to 72 inches; grayish brown very gravelly sand, high permeability
Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Fubar and Similar Soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: moderately well drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—54 inches
Ponding: none
Available water capacity (approximate): 3.4 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:
Oi—0 to 2 inches; dark brown slightly decomposed plant material, high permeability
C1—2 to 10 inches; dark grayish brown stratified fine sand to silt loam, moderately high permeability
2C2—10 to 72 inches; dark gray very gravelly coarse sand, high permeability
Note: This soil has 1 to 10 inches of loamy material over sand and gravel.

Minor Components

Eielson and similar soils: 0 to 10 percent of the map unit

Noonku and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, permeability, sand and gravel

160—Pits, gravel

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Pits, gravel

Extent: 100 percent of the map unit
Landform: gravel pits
Slope shape: convex, concave, linear
Slope range: 0 to 60 percent

161—Pits, quarry

Elevation: 1,476 to 3,264 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Pits, quarry

Extent: 100 percent of the map unit
Landform: quarries
Slope shape: concave, convex, linear
Slope range: 0 to 100 percent
Vegetation: none, or sparse herbaceous vegetation and willows

162—Riverwash

Elevation: 397 to 1,640 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 75 to 104 days

Riverwash

Extent: 100 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent

163—Salchaket very fine sandy loam

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Salchaket and Similar Soils

Extent: 80 to 90 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—more than 72 inches
Ponding: frequent
Available water capacity (approximate): 9.7 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability
C1—3 to 24 inches; olive brown very fine sandy loam, moderately high permeability
C2—24 to 45 inches; dark grayish brown stratified silt loam to fine sand, moderately high permeability
2C3—45 to 72 inches; variegated very gravelly sand, high permeability
Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Jarvis and similar soils: 5 to 10 percent of the map unit
Tanana and similar soils: 5 to 10 percent of the map unit

Management Considerations

Soil-related factors: flooding, ponding

164—Salchaket-Typic Cryorthents complex

Elevation: 397 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Salchaket and Similar Soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—more than 72 inches
Ponding: frequent
Available water capacity (approximate): 9.7 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability
C1—3 to 24 inches; variegated very fine sandy loam, moderately high permeability
C2—24 to 45 inches; dark grayish brown stratified silt loam to fine sand, moderately high permeability
2C3—45 to 72 inches; olive brown very gravelly sand, high permeability
Note: This soil has more than 40 inches of loamy material over sand and gravel.

Typic Cryorthents and Similar Soils

Extent: 30 to 40 percent of the map unit
Landform: flood plains, terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: gravelly fill over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 7.7 inches
Vegetation: seeded or planted grasses, shrubs, or trees
Representative Profile:
C—0 to 30 inches; light brownish gray stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam, moderately high permeability
2C1—30 to 63 inches; light olive brown stratified fine sand to silt loam, high permeability
2C2—63 to 72 inches; light brownish gray very gravelly sand, high permeability

Minor Components

Jarvis and similar soils: 0 to 15 percent of the map unit
Fubar and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: high gravel content, flooding, ponding

165—Saulich peat, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and Similar Soils

Extent: 70 to 85 percent of the map unit
Landform: valley sides
Slope shape: concave, linear
Slope range: 3 to 7 percent
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; black and dark brown peat, high permeability
Bg/A—16 to 21 inches; dark grayish brown

mucky silt loam, moderately high permeability
Cfg—21 to 72 inches; very dark brown permanently frozen material, impermeable

Minor Components

Goldstream and similar soils: 3 to 10 percent of the map unit
Saulich, slopes less than 3 percent, and similar soils: 3 to 10 percent of the map unit
Saulich, slopes more than 7 percent, and similar soils: 3 to 10 percent of the map unit
Chatanika and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

166—Saulich peat, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and Similar Soils

Extent: 75 to 85 percent of the map unit
Landform: valley sides
Slope shape: concave, linear
Slope range: 7 to 12 percent
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; very dark brown peat, high permeability
Bg/A—16 to 21 inches; dark grayish brown mucky silt loam, moderately high permeability
Cfg—21 to 72 inches; black and dark brown permanently frozen material, impermeable

Minor Components

Goldstream and similar soils: 3 to 10 percent of the map unit
Saulich, slopes less than 7 percent, and similar soils: 3 to 5 percent of the map unit
Saulich, slopes more than 12 percent, and similar soils: 3 to 5 percent of the map unit
Chatanika and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

167—Saulich peat, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and Similar Soils

Extent: 70 to 85 percent of the map unit
Landform: valley sides
Slope shape: concave, linear
Slope range: 12 to 20 percent
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; very dark brown peat, high permeability
Bg/A—16 to 21 inches; dark grayish brown mucky silt loam, moderately high permeability

Cfg—21 to 72 inches; black and dark brown permanently frozen material, impermeable

Minor Components

Ester and similar soils: 0 to 7 percent of the map unit
Goldstream and similar soils: 5 to 10 percent of the map unit
Saulich, slopes less than 12 percent, and similar soils: 5 to 10 percent of the map unit
Saulich, slopes more than 20 percent, and similar soils: 5 to 10 percent of the map unit
Chatanika and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

168—Saulich-Minto complex, 3 to 12 percent slopes

Elevation: 499 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and Similar Soils

Extent: 30 to 45 percent of the map unit
Landform: valley sides
Slope shape: concave, linear
Slope range: 3 to 12 percent
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; dark grayish brown peat, high permeability
Bg/A—16 to 21 inches; black and dark brown mucky silt loam, moderately high permeability
Cfg—21 to 72 inches; very dark brown permanently frozen material, impermeable

Minto and Similar Soils

Extent: 30 to 45 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 3 to 12 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; dark brown slightly decomposed plant material, high permeability
A—5 to 9 inches; light olive brown silt loam, moderately high permeability
Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high permeability
C—16 to 72 inches; grayish brown silt loam, moderately high permeability
Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Minto, slopes more than 12 percent, and similar soils: 2 to 10 percent of the map unit
Saulich, slopes less than 7 percent, and similar soils: 2 to 10 percent of the map unit
Minto, slopes less than 7 percent, and similar soils: 2 to 7 percent of the map unit
Saulich, slopes more than 12 percent, and similar soils: 2 to 7 percent of the map unit
Chatanika and similar soils: 0 to 10 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

169—Saulich-Minto complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and Similar Soils

Extent: 30 to 45 percent of the map unit
Landform: valley sides
Slope shape: concave, linear
Slope range: 12 to 20 percent
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; very dark brown peat, high permeability
Bg/A—16 to 21 inches; dark grayish brown mucky silt loam, moderately high permeability
Cfg—21 to 72 inches; black and dark brown permanently frozen material, impermeable

Minto and Similar Soils

Extent: 30 to 45 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave, convex
Slope range: 12 to 20 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; light olive brown slightly decomposed plant material, high permeability
A—5 to 9 inches; dark brown silt loam, moderately high permeability
Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high permeability
C—16 to 72 inches; grayish brown silt loam, moderately high permeability
Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Minto, slopes less than 12 percent, and similar soils: 0 to 7 percent of the map unit
Minto, slopes more than 20 percent, and similar soils: 0 to 7 percent of the map unit
Saulich, slopes more than 20 percent, and similar soils: 0 to 7 percent of the map unit
Chatanika and similar soils: 0 to 7 percent of the map unit
Saulich, slopes less than 12 percent, and similar soils: 0 to 7 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

170—Steese silt loam, 3 to 7 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 3 to 7 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:
Oi—0 to 2 inches; light olive brown slightly decomposed plant material, high permeability
A—2 to 5 inches; brown silt loam, moderately high permeability
Bw—5 to 27 inches; dark brown silt loam, moderately high permeability
2C—27 to 33 inches; light olive brown very channery silt loam, high permeability
2Cr—33 to 72 inches; light olive brown weathered bedrock

Minor Components

Steese, slopes more than 7 percent, and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 2 to 10 percent of the map unit
Gilmore and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: bedrock

171—Steese silt loam, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: backslopes, shoulders
Slope shape: convex, linear
Slope range: 7 to 12 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:
Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
A—2 to 5 inches; dark brown silt loam, moderately high permeability
Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability
2C—27 to 33 inches; brown very channery silt loam, high permeability
2Cr—33 to 72 inches; brown weathered bedrock

Minor Components

Steese, slopes more than 12 percent, and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 2 to 10 percent of the map unit
Gilmore and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

172—Steese silt loam, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 60 to 75 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:
Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
A—2 to 5 inches; dark brown silt loam, moderately high permeability
Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability
2C—27 to 33 inches; brown very channery silt loam, high permeability
2Cr—33 to 72 inches; brown weathered bedrock

Minor Components

Steese, slopes more than 20 percent, and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 2 to 10 percent of the map unit
Gilmore and similar soils: 2 to 10 percent of the map unit
Steese, slopes less than 12 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock substratum

173—Steese silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 70 to 85 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 20 to 30 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; dark brown slightly decomposed plant material, high permeability
A—2 to 5 inches; brown silt loam, moderately high permeability
Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability
2C—27 to 33 inches; dark brown very channery silt loam, high permeability
2Cr—33 to 72 inches; dark brown weathered bedrock

Minor Components

Steese, slopes more than 30 percent, and similar soils: 2 to 10 percent of the map unit
Gilmore and similar soils: 2 to 10 percent of the map unit
Steese, slopes less than 20 percent, and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 2 to 10 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

174—Steese silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 80 to 95 percent of the map unit
Landform: hills
Position on slope: backslopes, shoulders
Slope shape: convex, linear
Slope range: 30 to 45 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches

Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
A—2 to 5 inches; dark brown silt loam, moderately high permeability
Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability
2C—27 to 33 inches; brown very channery silt loam, high permeability
2Cr—33 to 72 inches; brown weathered bedrock

Minor Components

Steese, slopes less than 30 percent, and similar soils: 5 to 15 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

175—Steese silt loam, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 85 to 95 percent of the map unit
Landform: hills
Position on slope: backslopes, shoulders
Slope shape: linear, convex
Slope range: 45 to 70 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
A—2 to 5 inches; dark brown silt loam, moderately high permeability
Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability
2C—27 to 33 inches; brown very channery silt loam, high permeability
2Cr—33 to 72 inches; brown weathered bedrock

Minor Components

Gilmore and similar soils: 0 to 10 percent of the map unit
Steese, slopes less than 45 percent, and similar soils: 5 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

176—Steese-Gilmore complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 30 to 60 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:
Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
A—2 to 5 inches; light olive brown silt loam, moderately high permeability
Bw—5 to 27 inches; dark brown silt loam, moderately high permeability
2C—27 to 33 inches; brown very channery silt loam, high permeability
2Cr—33 to 72 inches; brown weathered bedrock

Gilmore and Similar Soils

Extent: 20 to 40 percent of the map unit
Landform: hills
Position on slope: summits, backslopes
Slope shape: linear, convex
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability
A—3 to 6 inches; olive brown silt loam, moderately high permeability
Bw—6 to 12 inches; yellowish brown silt loam, moderately high permeability
2BC—12 to 19 inches; dark brown very channery silt loam, high permeability
2Cr—19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 12 percent, and similar soils: 5 to 15 percent of the map unit
Steese, slopes more than 20 percent, and similar soils: 5 to 15 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

177—Steese-Gilmore complex, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 30 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes, shoulders
Slope shape: convex, linear
Slope range: 20 to 30 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
A—2 to 5 inches; dark brown silt loam, moderately high permeability
Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability
2C—27 to 33 inches; brown very channery silt loam, high permeability
2Cr—33 to 72 inches; brown weathered bedrock

Gilmore and Similar Soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: summits, backslopes
Slope shape: linear, convex
Slope range: 20 to 30 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none

Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; olive brown slightly decomposed plant material, high permeability
A—3 to 6 inches; dark brown silt loam, moderately high permeability
Bw—6 to 12 inches; yellowish brown silt loam, moderately high permeability
2BC—12 to 19 inches; olive brown very channery silt loam, high permeability
2Cr—19 to 72 inches; olive brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 20 percent, and similar soils: 2 to 15 percent of the map unit
Steese, slopes less than 20 percent, and similar soils: 2 to 12 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

178—Steese-Gilmore complex, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 30 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes, shoulders
Slope shape: convex, linear
Slope range: 30 to 45 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
A—2 to 5 inches; light olive brown silt loam, moderately high permeability
Bw—5 to 27 inches; dark brown silt loam, moderately high permeability
2C—27 to 33 inches; brown very channery silt loam, high permeability
2Cr—33 to 72 inches; brown weathered bedrock

Gilmore and Similar Soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: summits, backslopes
Slope shape: linear, convex
Slope range: 30 to 45 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability
A—3 to 6 inches; yellowish brown silt loam, moderately high permeability
Bw—6 to 12 inches; olive brown silt loam, moderately high permeability
2BC—12 to 19 inches; dark brown very channery silt loam, high permeability
2Cr—19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 30 percent, and similar soils: 5 to 15 percent of the map unit
Steese, slopes more than 45 percent, and similar soils: 5 to 15 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

179—Steese-Gilmore complex, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and Similar Soils

Extent: 40 to 60 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 45 to 70 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; light olive brown slightly decomposed plant material, high permeability
A—2 to 5 inches; brown silt loam, moderately high permeability
Bw—5 to 27 inches; dark brown silt loam, moderately high permeability
2C—27 to 33 inches; light olive brown very channery silt loam, high permeability
2Cr—33 to 72 inches; light olive brown weathered bedrock

Gilmore and Similar Soils

Extent: 40 to 60 percent of the map unit
Landform: hills
Position on slope: summits, backslopes
Slope shape: linear, convex
Slope range: 45 to 70 percent
Parent material: loess over residuum weathered from schist
Depth to bedrock (paralithic): 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability
A—3 to 6 inches; yellowish brown silt loam, moderately high permeability
Bw—6 to 12 inches; olive brown silt loam, moderately high permeability
2BC—12 to 19 inches; dark brown very channery silt loam, high permeability
2Cr—19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 45 percent, and similar soils: 2 to 10 percent of the map unit
Steese, slopes less than 45 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

180—Tanacross peat

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Tanacross and Similar Soils

Extent: 85 to 95 percent of the map unit
Landform: alluvial flats
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: organic material over alluvium
Depth to permafrost: 10 to 28 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained

Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 3.0 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; dark brown peat, high permeability
A—9 to 11 inches; dark gray and dark yellowish brown mucky silt loam, moderately high permeability
Bjjg—11 to 17 inches; black stratified fine sandy loam to silt loam, moderately high permeability
Bjjfg—17 to 72 inches; dark brown permanently frozen material, impermeable

Minor Components

Tanana and similar soils: 5 to 15 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, flooding, frost action

181—Tanana mucky silt loam

Elevation: 397 to 951 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Tanana and Similar Soils

Extent: 60 to 85 percent of the map unit
Landform: terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium and/or loess over alluvium
Depth to permafrost: 16 to 47 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare

Depth to high water table (approximate): April-May—0 inches; June-Sept.—6 to 12 inches
Ponding: frequent
Available water capacity (approximate): 5.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 3 inches; dark grayish brown slightly decomposed plant material, high permeability
A—3 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability
Bjjg—6 to 25 inches; very dark brown very fine sandy loam, moderately high permeability
Cjjfg—25 to 72 inches; dark grayish brown permanently frozen material, impermeable

Minor Components

Bolio and similar soils: 0 to 5 percent of the map unit
Jarvis and similar soils: 2 to 5 percent of the map unit
Noonku and similar soils: 3 to 5 percent of the map unit
Salchaket and similar soils: 5 to 10 percent of the map unit
Tanacross and similar soils: 5 to 15 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, flooding, frost action

182—Tanana-Mosquito complex

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Tanana and Similar Soils

Extent: 50 to 70 percent of the map unit
Landform: terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium and/or loess over alluvium
Depth to permafrost: 16 to 47 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—6 to 12 inches
Ponding: frequent
Available water capacity (approximate): 5.2 inches
Vegetation: black spruce forest

Representative Profile:
Oi—0 to 3 inches; dark grayish brown slightly decomposed plant material, high permeability
A—3 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability
Bjjg—6 to 25 inches; very dark brown very fine sandy loam, moderately high permeability
Cjjfg—25 to 72 inches; dark grayish brown permanently frozen material, impermeable

Mosquito and Similar Soils

Extent: 20 to 25 percent of the map unit
Landform: depressions on alluvial flats
Slope shape: linear, concave
Slope range: 0 to 2 percent
Parent material: organic material over alluvium
Depth to permafrost: 14 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 4.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 18 inches; black peat, high permeability
Cg—18 to 24 inches; dark grayish brown very fine sandy loam, moderately high permeability
Cfg—24 to 72 inches; black permanently frozen material, impermeable

Minor Components

Jarvis and similar soils: 5 to 15 percent of the map unit
Liscum and similar soils: 0 to 5 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, permafrost, frost action

183—Typic Cryaquent, Histic Cryaquept, and Terric Cryofibrist soils

Elevation: 397 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Typic Cryaquents and Similar Soils

Extent: 0 to 90 percent of the map unit
Landform: depressions on terraces
Slope shape: concave
Slope range: 0 to 5 percent
Parent material: lacustrine silt or loess
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: low
Drainage class: poorly drained
Flooding: frequent
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 13.9 inches
Vegetation: sedges, grasses, and low shrubs
Representative Profile:
Oe—0 to 6 inches; dark yellowish brown moderately decomposed plant material, moderately high permeability
Cg—6 to 72 inches; dark gray and dark grayish brown silt loam, moderately high permeability

Histic Cryaquepts and Similar Soils

Extent: 20 to 50 percent of the map unit
Landform: depressions on terraces
Slope shape: concave
Slope range: 0 to 3 percent
Parent material: organic material over loess
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 16 inches
Ponding: frequent
Available water capacity (approximate): 11.8 inches
Vegetation: sedges, grasses, and low shrubs
Representative Profile:
Oa—0 to 13 inches; dark grayish brown muck, high permeability
C—13 to 30 inches; olive brown silt loam, moderately high permeability
Cg—30 to 72 inches; very dark brown silt loam, moderately high permeability

Terric Cryofibrists and Similar Soils

Extent: 0 to 80 percent of the map unit
Landform: thermokarst depressions

Slope shape: concave
Slope range: 0 to 1 percent
Parent material: organic material over lacustrine deposits and/or loess
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 15.0 inches
Vegetation: sedges
Representative Profile:
Oi—0 to 28 inches; black peat, high permeability
Oa—28 to 40 inches; very dark brown muck, moderately low permeability
Cg—40 to 72 inches; black silty clay loam, moderately high permeability

Minor Components

Histels and similar soils: 0 to 50 percent of the map unit
Water: 0 to 20 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

184—Typic Cryorthents, pit spoil

Elevation: 397 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Typic Cryorthents and Similar Soils

Extent: 75 to 95 percent of the map unit
Landform: flood plains, terraces
Slope shape: linear
Slope range: 0 to 7 percent
Parent material: mine spoil over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 10.9 inches
Vegetation: paper birch and balsam poplar forest and alder scrub
Representative Profile:
Oi—0 to 1 inch; light olive brown mottled slightly decomposed plant material, high permeability
C1—1 to 49 inches; dark brown stratified fine sand to silt loam, moderately high permeability
2C2—49 to 72 inches; grayish brown very gravelly sand, high permeability
Note: This soil occurs on highly irregular topography consisting of small (3 to 15 feet), man-made hills with steep slopes.

Minor Components

Fubar and similar soils: 0 to 10 percent of the map unit
Jarvis and similar soils: 0 to 10 percent of the map unit
Piledriver and similar soils: 0 to 10 percent of the map unit
Salchaket and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope

185—Typic Cryorthents-Urban land complex

Elevation: 397 to 1,299 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Typic Cryorthents, fill, and Similar Soils

Extent: 40 to 60 percent of the map unit
Landform: flood plains, terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: gravelly fill over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—more than 72 inches

Ponding: none
Available water capacity (approximate): 7.7 inches
Vegetation: seeded or planted grasses, shrubs, or trees
Representative Profile:
C—0 to 30 inches; light brownish gray stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam, moderately high permeability
2C1—30 to 63 inches; light olive brown stratified fine sand to silt loam, high permeability
2C2—63 to 72 inches; light brownish gray very gravelly sand, high permeability

Urban land

Extent: 30 to 60 percent of the map unit
Landform: urban land
Slope shape: convex, linear
Slope range: 0 to 2 percent
Note: Urban land is mostly covered by streets, parking lots, buildings, and other structures of urban areas.

Minor Components

Salchaket and similar soils: 0 to 15 percent of the map unit

Jarvis and similar soils: 0 to 10 percent of the map unit

Fubar and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: high gravel content, permeability, flooding

186—Urban land

Elevation: 397 to 853 feet
Mean annual precipitation: 10 to 14 inches

Urban land

Extent: 100 percent of the map unit
Landform: urban land
Slope shape: convex, linear
Slope range: 0 to 2 percent
Note: Urban land is mostly covered by streets, parking lots, buildings, and other structures of urban areas.

187—Water

Water

Extent: 100 percent of the map unit
Landform: lakes

Soil Properties

Data relating to soil properties are collected during the course of the soil survey. Soil properties are ascertained by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Engineering Index Properties

Tables 5 and 6 give the engineering index properties and particle size data for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the USDA. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. “Loam,” for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, “gravelly.” Textural terms are defined in the Glossary.

Table 5 shows the engineering classifications and the range of index properties for the layers of each soil in the survey area.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2001) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2000).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle size distribution of the fraction less than 3 inches (75 mm) in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, SP-SM.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches (75 mm) in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

Table 6 gives particle size data for each soil in the survey area.

Rock fragments larger than 10 inches (250 mm) in diameter and 3 to 10 inches (75 to 250 mm) in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches (75 mm) in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. The estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. The estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. The estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

Physical Properties

Table 7 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $^1/_3$- or $^1/_{10}$-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability refers to the ability of a soil to transmit water or air. The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In table 7, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in table 7 as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of several factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. Soils are grouped according to the amount of stable aggregates more than 0.84 millimeter in size. Soils containing rock fragments can occur in any group. The groups are as follows:

1. 1 to 9 percent dry soil aggregates. These soils are very highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
2. 10 to 24 percent dry soil aggregates. These soils are highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
3. 25 to 39 percent dry soil aggregates. These soils are erodible. Crops can be grown if intensive measures to control wind erosion are used.
4. 25 to 39 percent dry soil aggregates with > 35 percent clay or > 5 percent calcium carbonate. These soils are moderately erodible. Crops can be grown if measures to control wind erosion are used.
5. 40 to 44 percent dry soil aggregates. These soils are slightly erodible. Crops can be grown if measures to control wind erosion are used.
6. 45 to 49 percent dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.
7. 50 percent or more dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.
8. Stony, gravelly, or wet soils and other soils not subject to wind erosion.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Properties

Table 8 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are

based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Water Features

Table 9 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as *none, very rare, rare, occasional, frequent*, and *very frequent*. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods is also considered. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone

areas at specific flood frequency levels.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. Table 9 indicates surface water *depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Moisture status indicates the water content in the soil at a specified depth. The *Status* is expressed as *wet, moist*, or *dry*. *Wet* refers to soil in which most of the pore space is filled with water and the water is retained at less than 0.00001 bar suction. *Moist* refers to soil in which some of the pore space is filled with water and the water is retained at between 0.00001 and 15 bar suction. *Dry* refers to soil with little to no water in the pore spaces. Any water is retained at greater than 15 bar suction, which is generally near or above the wilting point of common agricultural crops. *Frozen* is used to indicate that the temperature of the soil layer is below the freezing point of water.

Soil Features

Table 10 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness of the restrictive layer which significantly affects the ease of excavation.

Depth to top is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures. Potential for frost action is expressed as *low, moderate*, or *high*.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Use and Management of the Soil

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, foresters, botanists, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as rangeland and forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreation facilities; and for wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, permafrost, or unstable soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, and trails.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. The soils in each capability class or subclass is shown in table 11. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (USDA, 1961). Only capability class and subclass are presented for soils in Alaska.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use. There are no Class 1 soils in Alaska due to the climate.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e, w, s,* or *c,* to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c,* used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w, s,* or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. Other tables indicate the suitability of the soils for use as source materials. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited, somewhat limited,* and *very limited*. The suitability ratings are expressed as *source, probable source*, and *improbable source* or as *good, fair,* and *poor*. In some tables, *slight, moderate,* and *severe* are used to describe the degree to which certain soil features or site characteristics result in limitations that affect a specified use of the soil.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. The numerical ratings, as they relate to each specific interpretation, are explained in the sections that follow.

Forest Productivity

In table 12, the *potential productivity* of *common trees* on a soil is expressed as a site index. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. The site index is determined from height and age measurements of selected trees from stands throughout the survey area and in nearby areas with similar soils and climate. Tables and equations for determining site index are given in the appropriate publication for each major tree species (Farr, 1967; Gregory and Haack, 1965; Quenet and Manning, 1990). Site index should be used as a comparative index between soils and an approximate measure of height growth, not an absolute or expected value. The most rapid tree growth and greatest yields of a particular tree species can be expected on soils with the highest site indices.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Forest Management

In table 13, interpretive ratings are given for various aspects of forest management. The ratings are both verbal and numerical.

Ratings in the column *hazard of off-road or off-trail erosion* are based on slope and on soil erodibility factor K. The soil loss is caused by sheet or rill erosion in off-road or off-trail areas where 50 to 75 percent of the surface has been exposed by logging, grazing, mining, or other kinds of disturbance. The hazard is described as slight, moderate, severe, or very severe. A rating of *slight* indicates that erosion is unlikely under ordinary climatic conditions; *moderate* indicates that some erosion is likely and that erosion-control measures may be needed; *severe* indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and *very*

severe indicates that significant erosion is expected, loss of soil productivity and off-site damage are likely, and erosion-control measures are costly and generally impractical.

Ratings in the column *hazard of erosion on roads and trails* are based on the soil erodibility factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that little or no erosion is likely; *moderate* indicates that some erosion is likely, that the roads or trails may require occasional maintenance; and that simple erosion-control measures are needed; and *severe* indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

Ratings in the column *suitability for roads (natural surface)* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The ratings indicate the suitability for using the natural surface of the soil for roads. The soils are described as well suited, moderately suited, or poorly suited to this use.

Engineering

This section provides information for planning land uses related to building sites. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, and construction materials. The ratings are based on observed performance of the soils and on the estimates given under the heading Soil Properties.

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet (1.5 to 2.1 m). Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet (1.5 to 2.1 m) of the surface, soil wetness, depth to water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 14 and 15 show the degree and kind of soil limitations that affect structures and site improvements, including dwellings with and without basements, small commercial buildings, local roads and streets, and shallow excavations.

Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited*

indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical values in the tables indicate the severity of individual limitations. The values are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is not limited (value = 0.00), no entry appears for the numerical value.

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet (0.6 m) or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet (2.1 m). The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet (0.6 m) or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet (1.5 or 1.8 m) for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Sanitary Facilities

Tables 16 and 17 show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates

that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical values in the tables indicate the severity of individual limitations. The values are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 4 and 6 feet (1.2 and 1.8 m) is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock, permafrost, or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet (1.2 m) below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock, permafrost, or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches (5 cm) per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches (102 cm), if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet (0.6 m) thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock, permafrost, or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet (1.8 m). For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet

are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet (0.6 m) thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock, permafrost, or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Tables 18 and 19 give information about the soils as potential sources of gravel, sand, topsoil, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

In table 18 the soils are rated as a *probable* or *improbable* source of sand and gravel. A rating of *probable* means that the source material is likely to be in or below the soil. The numerical ratings in these columns indicate the degree of probability. The number 0.00 indicates that the soil is an improbable source. A number between 0.00 and 1.00 indicates the degree to which the soil is a probable source of sand or gravel.

Sand and *gravel* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 18, only the probability of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the lowest layer of the soil contains sand or gravel, the soil is rated as a probable source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

In table 19 the soils are rated *good, fair,* or *poor* as potential sources of topsoil, and roadfill. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of topsoil or roadfill. The lower the number, the greater the limitation. Only material in suitable quantity is evaluated.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches (102 cm) of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the

material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. Rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material affect the ease of excavating, loading and spreading. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet (1.8 m) high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet (1.5 m). It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties affecting the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. Large stones, depth to a water table, and slope affect the ease of excavation. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential). Susceptibility to frost action is also considered. The soils are rated based on the most limiting layers. Often a soil will have finer textured upper layers that are affected by frost action, while coarser textured lower layers in the same soil may not be affected.

Hydric Soils

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed.

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for each of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The criteria used are selected estimated soil properties that are described in *Soil Taxonomy* (Soil Survey Staff, 1999) and *Keys to Soil Taxonomy* (Soil Survey Staff, 1998) and in the *Soil Survey Manual* (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils in this survey area are specified in *Field Indicators of Hydric Soils in the United States* (Hurt and others, 1998).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches (50 cm). This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Those soils that meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators, are listed in table 20. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 1998).

Some map units consist almost entirely of hydric soils, such as map unit 101—Bolio peat (in which all listed components are hydric). Other map units consist primarily of nonhydric soils, such as map unit 118—Fairbanks silt loam, 12 to 20 percent slopes, (in which all listed components are nonhydric), or map unit 162—Salchaket fine sandy loam (in which hydric soils are present only as minor components). Hydric soils may occur as minor inclusions even in map units listed without any hydric soils in table 20.

Table 20 also lists the local landform on which each soil occurs, the hydric criteria code, and whether or not each soil meets the saturation, flooding, or ponding criteria for hydric soils. Codes for hydric soil criteria are explained in the following key:

Key To Hydric Soil Criteria

1. All Histosols except Folists, or
2. Soils in Aquic suborders, Aquic subgroups, Albolls suborder, Salorthids great group, Pell great groups of Vertisols, Pachic subgroups, or cumulic subgroups that are:

a. somewhat poorly drained and have a frequently occurring water table at less than 0.5 foot from the surface for a significant period (usually more than 2 weeks) during the growing season, or

b. poorly drained or very poorly drained and have either:

(1) a frequently occurring water table at less than 0.5 foot from the surface for a significant period (usually more than 2 weeks) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or for other soils

(2) a frequently occurring water table at less than 1.0 foot from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is equal to or greater than 6.0 inches/hour in all layers within a depth of 20 inches, or

(3) a frequently occurring water table at less than 1.5 feet from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is less than 6.0 inches/hour in any layer within a depth of 20 inches, or

3. Soils that are frequently ponded for a long duration or a very long duration during the growing season, or
4. Soils that are frequently flooded for a long duration or a very long duration during the growing season.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1998 and 1999). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 21 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is *Inceptisol*.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is *Cryept* (*cry*, meaning cold, plus *ept*, from *Inceptisol*).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is *Eutrocryepts* (*Eutro* meaning high base saturation, plus *ochrept*, the cold suborder of the *Inceptisols*).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *typic* identifies the subgroup that typifies the great group. An example is *Typic Eutrocryepts.*

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle size, mineral content, soil temperature regime, soil depth, and reaction. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is *coarse-silty, mixed, superactive, Typic Eutrocryepts*.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. An example from this survey area is the *Fairbanks Series*.

Taxonomic Units and Their Morphology

In this section, the taxonomic units recognized in the survey area are described. Characteristics of the soil and the material in which it formed are identified for each taxonomic unit. A pedon, a small three-dimensional area of soil, that is typical of the taxonomic unit in the survey area is described. The detailed description of each soil horizon follows standards in the *Soil Survey Manual* (Soil Survey Division Staff, 1993). Many of the technical terms used in the descriptions are defined in *Soil Taxonomy* (Soil Survey Staff, 1999) and in *Keys to Soil Taxonomy* (Soil Survey Staff, 1998). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the taxonomic unit.

Bolio Series

Taxonomic Classification

- Euic, subgelic Typic Hemistels

Setting

Depth class: shallow or moderately deep over permafrost
Drainage class: very poorly drained
Landform: alluvial terraces
Parent material: organic matter
Slope: 0 to 2 percent
Elevation: 420 to 950 feet (128 to 290 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 101—Bolio peat
Location in survey area: NW¼, NW¼, Section 34, T1N, R1W, Fairbanks Meridian

Typical Pedon

Bolio peat—on a level slope at 450 feet (137 m) elevation, under dwarf birch scrub and sedge vegetation:

Oi—0 to 12 inches (0 to 30 cm); very dark brown (10YR 2/2) peat; many very fine to coarse roots; very strongly acid (pH 4.8); diffuse smooth boundary.
Oe—12 to 16 inches (30 to 40 cm); black (10YR 2/1) mucky peat; few very fine and fine roots; moderately acid (pH 5.6); diffuse smooth boundary.
Oef1—16 to 22 inches (40 to 55 cm); black (10YR 2/1) permanently frozen mucky peat; moderately acid (pH 5.6); clear smooth boundary.
Oef2—22 to 60 inches (55 to 152 cm); dark brown (10YR 3/3) permanently frozen mucky peat; moderately acid (pH 5.8).

Range in Characteristics

Organic layer thickness: greater than 40 inches (> 102 cm)
Depth to permafrost: 14 to 28 inches (36 to 71 cm)

Oi horizon:
Color—hue of 7.5YR or 10YR; value from 2 to 4; chroma from 2 to 6
Reaction—extremely acid to neutral

Oe horizon:
Color—hue from 5YR to 10YR; value of 2 or 3; chroma of 1 or 2
Reaction—extremely acid to moderately acid

Oef horizon:
Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 or 2
Texture—hemic peat or stratified hemic and sapric peat
Reaction—moderately or slightly acid

Cfg horizon (when present):
Color—hue of 10YR or 2.5Y; value from 3 to 5; chroma of 1 or 2
Texture—silt loam, mucky silt loam, or peaty silty clay loam
Reaction—moderately acid to neutral

Bradway Series

Taxonomic Classification

- Coarse-loamy, mixed, superactive, subgelic Typic Aquiturbels

Setting

Depth class: shallow or moderately deep over permafrost
Drainage class: poorly drained
Landform: flood plains and terraces
Parent material: alluvium or loess over alluvium
Slope: 0 to 2 percent
Elevation: 497 to 650 feet (151 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 102—Bradway very fine sandy loam
Location in survey area: SW¼, NW¼, Section 30, T1S, R1E, Fairbanks Meridian

Typical Pedon

Bradway very fine sandy loam—on a level slope at 400 feet (122 m) elevation under birch shrub vegetation:

Oi—0 to 4 inches (0 to 10 cm); dark brown (7.5YR 3/2) mat of roots and slightly decomposed plant material; very strongly acid (pH 4.6); clear smooth boundary.
Oe—4 to 7 inches (10 to 18 cm); black (10YR 2/1) moderately decomposed plant material; strongly acid (pH 5.2); abrupt smooth boundary.
A—7 to 10 inches (18 to 25 cm); dark grayish brown (10YR 4/2) very fine sandy loam; weak thin platy structure; very friable, nonsticky and nonplastic; common fine roots; strongly acid (pH 5.4); clear wavy boundary.
Cg—10 to 26 inches (25 to 66 cm); gray (2.5Y 5/1) stratified very fine sandy loam and silt loam; moderately thin platy structure; very friable, nonsticky and nonplastic; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; few roots; moderately acid (pH 5.6); clear wavy boundary.
Cfg—26 to 60 inches (66 to 152 cm); gray (N 5/) permanently frozen stratified very fine sandy loam and silt loam; massive; very firm; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; slightly acid (pH 6.2).

Range in Characteristics

Organic layer thickness: 2 to 7 inches (5 to 17 cm)
Depth to permafrost: 10 to 28 inches (25 to 71 cm)

O horizons:
Color—hue of 5YR, 7.5YR, or 10YR; value from 2 to 5; chroma from 1 to 6
Texture—slightly or moderately decomposed plant material
Reaction—very strongly to moderately acid

Cg horizon (when present):
Color—hue of 2.5Y, 5Y, 5GY, or N; value of 4 or 5; chroma from 0 to 2
Texture—silt loam, very fine sandy loam or stratified very fine sandy loam, and silt loam
Reaction—strongly acid to neutral

Cfg horizon:
Color—hue of 2.5Y, 5Y, 5GY, or N; value of 4 or 5; chroma from 0 to 2
Texture—silt loam, very fine sandy loam or stratified very fine sandy loam, and silt loam
Reaction—moderately acid to neutral

Brigadier Series

Taxonomic Classification

- Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts

Setting

Depth class: very shallow or shallow over weathered bedrock
Drainage class: well drained
Landform: hill crests and slopes
Parent material: loess over weathered schist bedrock
Slope: 15 to 70 percent
Elevation: 1,001 to 2,799 feet (304 to 851 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 86X—Brigadier and Gilmore, cool silt loams, 15 to 45 percent slopes, Fort Wainwright survey area
Location in survey area: UTM zone 6, 515720E 7161229N

Typical Pedon

Brigadier silt loam—on a 44 percent slope at 1,700 feet (518 m) elevation, under a black spruce forest:

Oe—0 to 6 inches (0 to 16 cm); black (7.5YR 2.5/1) moderately decomposed plant material; many very fine to coarse roots; extremely acid (pH 3.8); clear smooth boundary.
A—6 to 8 inches (16 to 20 cm); black (7.5YR 2.5/1) silt loam; weak medium granular structure; friable, slightly sticky and slightly plastic; few very fine roots; very strongly acid (pH 4.6); abrupt wavy boundary.
2Bw—8 to 20 inches (20 to 50 cm); brown (10YR 4/3) extremely channery sandy loam; weak fine subangular blocky structure; very friable; slightly

sticky and slightly plastic; few fine roots; 40 percent channers, 10 percent flags, and 20 percent stones; strongly acid (pH 5.4); gradual smooth boundary.

2Cr—20 to 24 inches (50 to 60 cm); variegated weathered schist bedrock.

Range in Characteristics

Organic layer thickness: 4 to 9 inches (11 to 24 cm)
Depth to unconsolidated bedrock: 10 to 20 inches (25 to 50 cm) from the mineral soil surface

O horizon:
Color—hue of 5YR or 7.5YR; value from 2 to 4; chroma from 1 to 3
Texture: slightly or moderately decomposed plant material
Reaction—extremely acid or very strongly acid

A horizon:
Color—hue of 7.5YR or 10YR; value from 2 to 4; chroma from 1 to 3
Texture—silt loam or mucky silt loam
Reaction—extremely acid to strongly acid

2Bw horizon:
Color—value from 3 to 4; chroma from 3 to 4
Texture—silt loam, loam, or sandy loam
Coarse fragment content—35 to 70 percent
Reaction—strongly acid or moderately acid

2C horizon (when present):
Color—variegated or hue from 10YR to 5Y; value from 4 to 6; chroma from 3 to 6
Texture—loam, sandy loam, or loamy coarse sand in the fine earth fraction
Coarse fragment content—50 to 90 percent
Reaction—strongly acid or moderately acid

Chatanika Series

Taxonomic Classification

- Coarse-silty, mixed, superactive, subgelic Typic Aquiturbels

Setting

Depth class: moderately deep over permafrost
Drainage class: poorly drained
Landform: terraces and lower hill slopes
Parent material: colluviated silty loess
Slope: 0 to 20 percent
Elevation: 500 to 1,000 feet (152 to 305 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 103—Chatanika mucky silt loam, 0 to 3 percent slopes
Location in survey area: UTM zone 6, 495400 m E, 7167350 m N

Typical Pedon

Chatanika mucky silt loam—on a 1 percent slope at 550 feet (180 m) elevation, under a paper birch and black spruce forest with alder shrubs:

Oi—0 to 4 inches (0 to 10 cm); very dark grayish brown (10YR 3/2) slightly decomposed moss, leaves, twigs, and other woody debris; common fine and medium roots; very strongly acid (pH 5.0); clear wavy boundary.

A—4 to 6 inches (10 to 15 cm); very dark grayish brown (10YR 3/2) mucky silt loam; massive; friable, nonsticky and nonplastic; common fine and few medium roots; very strongly acid (pH 5.0); clear irregular boundary.

Cg/A—6 to 9 inches (15 to 23 cm); grayish brown (2.5Y 5/2) silt loam (Cg) and very dark grayish brown (10YR 3/2) mucky silt loam (A); massive; friable, nonsticky and nonplastic; common fine and few medium roots; strongly acid (pH 5.4); clear irregular boundary.

Cg—9 to 21 inches (23 to 53 cm); grayish brown (2.5Y 5/2) silt loam; weak medium platy structure; very friable, nonsticky and nonplastic; few fine roots; common medium prominent brown (7.5YR 4/4) redoximorphic concentrations; few dark brown (10YR 3/3) organic stained material; moderately acid (pH 6.0); clear smooth boundary.

Cfg—21 to 60 inches (53 to 152 cm); grayish brown (2.5Y 5/2) permanently frozen silt loam; massive; extremely firm; few medium prominent brown (7.5YR 4/4) redoximorphic concentrations, and common medium faint gray (2.5Y 5/1) redoximorphic depletions; moderately acid (pH 6.0).

Range in Characteristics

Organic layer thickness: 2 to 8 inches (5 to 20 cm)
Depth to permafrost: 20 to 40 inches (50 to 102 cm)

O horizon:
Color—hue of 10YR or 7.5YR; value of 2, 2.5, or 3; chroma from 1 to 3
Texture—slightly or moderately decomposed plant material
Reaction—extremely to slightly acid

A horizon:
Color—hue of 10YR or 2.5Y; value from 2 to 4; chroma from 1 to 3
Reaction—very strongly to slightly acid

Cg/A horizon:
Color—Cg material: hue of 10YR or 2.5Y; value from 4 to 6; chroma from 1 to 4—A material: hue of 10YR or 2.5Y; value from 2 to 4; chroma from 1 to 3
Reaction—very strongly to slightly acid

Cg horizon:
Color—hue of 10YR or 2.5Y; value from 4 to 6; chroma from 1 to 4
Texture—silt loam or very fine sandy loam
Reaction—moderately acid to neutral

Cfg horizon:
Color—hue of 10YR or 2.5Y; value of 5 or 6; chroma of 1 or 2
Texture—silt loam or very fine sandy loam
Reaction—moderately acid to neutral

Chena Series

Taxonomic Classification

- Sandy-skeletal, mixed Typic Cryorthents

Setting

Depth class: very deep
Drainage class: excessively drained
Landform: stream terraces
Parent material: alluvium
Slope range: 0 to 2 percent
Elevation: 400 to 660 feet (122 to 197 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 138—Jarvis-Chena complex
Location in survey area: SE¼, NW¼, Section 15, T3S, R3E, Fairbanks Meridian

Typical Pedon

Chena very fine sandy loam—on a level plain at 545 feet (166 m) elevation, under a paper birch and white spruce forest:

Oi—0 to 4 inches (0 to 10 cm); dark brown (7.5YR 3/2) slightly decomposed forest litter; many very fine to coarse roots; neutral (pH 7.0); abrupt smooth boundary.
C1—4 to 9 inches (10 to 23 cm); olive brown (2.5Y 4/3) very fine sandy loam; massive; very friable, nonsticky and nonplastic; few very fine to coarse roots; common medium prominent brown (7.5YR 5/4) redoximorphic concentrations; moderately acid (pH 6.0); gradual smooth boundary.
2C2—9 to 30 inches (23 to 75 cm); light grayish brown (2.5Y 5/2) very gravelly loamy sand; massive; loose, nonsticky and nonplastic; 40 percent gravel; neutral (pH 7.0); abrupt smooth boundary.
2C3—30 to 72 inches (75 to 183 cm); light olive brown (2.5Y 5/3) very gravelly sand; massive; loose, nonsticky and nonplastic; 40 percent gravel; slightly alkaline (7.4).

Range in Characteristics

Organic layer thickness: 0 to 6 inches (0 to 15 cm)
Depth to sand and gravel: 4 to 10 inches (10 to 25 cm)

O horizon:
Color—hue of 5YR or 7.5YR; value of 2 or 3; chroma of 1 or 2
Texture—moderately or slightly decomposed plant material
Reaction—strongly acid to neutral

C horizon (when present):
Color—hue of 2.5Y or 5Y; value of 3 or 4; chroma from 2 to 4

Texture—very fine sandy loam often with strata of fine sandy loam, fine sand, and very fine sand
Reaction—moderate or slightly acid

2C horizons:
Color—hue of 2.5Y or 5Y; value from 3 to 5; chroma from 2 to 4
Texture—sand, fine sand, loamy sand, or coarse sand
Gravel content—40 to 85 percent
Reaction—slightly acid to slightly alkaline

Eielson Series

Taxonomic Classification

- Coarse-loamy, mixed, superactive, nonacid Aquic Cryofluvents

Setting

Depth class: very deep
Drainage class: somewhat poorly drained
Landform: flood plains
Parent material: alluvium
Slope: 0 to 2 percent
Elevation: 397 to 650 feet (121 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 112—Eielson-Piledriver complex
Location in survey area: NE¼, SW¼, Section 27, T1S, R1W, Fairbanks Meridian

Typical Pedon

Eielson very fine sandy loam—on a 1 percent slope at 420 feet (128 m) elevation, under a white spruce and balsam poplar forest:

Oi—0 to 2 inches (0 to 6 cm); very dark brown (10YR 2/2) slightly decomposed moss, leaves, twigs, and other woody debris; common very fine to coarse roots; slightly acid (pH 6.2); abrupt smooth boundary.
O/C—2 to 11 inches (6 to 28 cm); stratified grayish brown (2.5Y 5/2) very fine sandy loam and very dark brown (10YR 2/2) moderately decomposed plant material; massive; very friable, slightly sticky and slightly plastic; common very fine and medium roots; slightly acid (pH 6.2); clear smooth boundary.
C1—11 to 49 inches (28 to 125 cm); grayish brown (2.5Y 5/2) stratified very fine sandy loam and silt loam; weak thick platy structure; friable, slightly sticky and slightly plastic; few very fine and fine roots; many fine and prominent strong brown (7.5YR 5/8) redoximorphic concentrations; slightly alkaline (pH 7.6); diffuse smooth boundary.
C2—49 to 60 inches (125 to 153 cm); grayish brown (2.5Y 5/2) stratified very fine sandy loam and loamy fine sand; massive; very friable, nonsticky and nonplastic; few coarse prominent dark yellowish brown (10YR 4/4) redoximorphic concentrations; slightly alkaline (pH 7.6); diffuse smooth boundary.
C3—60 to 72 inches (153 to 183 cm); dark grayish brown (2.5Y 4/2) stratified loamy fine sand and sand; single grain; loose, nonsticky and nonplastic; few coarse prominent yellowish red (5YR 4/6) redoximorphic concentrations and common fine and medium gray (5Y 5/1) redoximorphic depletions; slightly alkaline (pH 7.6).

Range in Characteristics

Organic layer thickness: 1 to 6 inches (3 to 15 cm)
Note: Thin buried organic horizons may occur throughout the profile.

O horizon:
Color—hue of 10YR or 7.5YR; value from 2 to 5; chroma from 1 to 4
Reaction—strongly acid to neutral

C horizon:
Color—hue of 10YR to 5Y; value from 3 to 6; chroma from 2 to 4
Texture—stratas of silt loam, very fine sandy loam, fine sandy loam, loamy fine sand, and sand
Reaction—slightly acid to slightly alkaline

2C horizon (when present):
Color—hue from 10YR to 5Y; value from 3 to 6; chroma from 1 to 3
Texture—stratas of loamy fine sand, fine sand, loamy sand, and coarse sand
Coarse fragment content—35 to 60 percent
Reaction—slightly acid to slightly alkaline

Ester Series

Taxonomic Classification

- Loamy-skeletal, mixed, superactive, subgelic, shallow Typic Histoturbels

Setting

Depth class: Shallow to moderately deep over bedrock and permafrost
Drainage class: very poorly drained
Landform: dominantly north-facing hillslopes
Parent material: organic matter over colluvium over weathered bedrock
Slope: 12 to 70 percent
Elevation: 750 to 2,800 feet (229 to 853 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 114—Ester peat, 20 to 45 percent slopes
Location in survey area: SW¼, SW¼, Section 11, T1N, R1W, Fairbanks Meridian

Typical Pedon

Ester peat—at 1,200 feet (366 m) elevation under a sparse black spruce forest with low shrubs and moss:

Oi—0 to 4 inches (0 to 10 cm); brown (7.5YR 4/4) peat consisting of raw sphagnum moss; very strongly acid (pH 4.6); clear smooth boundary.
Oe—4 to 9 inches (10 to 22 cm); olive gray (5Y 5/2) sphagnum moss mucky peat; many twigs, leaves, and roots; extremely acid (pH 4.2); abrupt smooth boundary.
ABjjf—9 to 12 inches (22 to 30 cm); permanently frozen very dark grayish brown (10YR 3/2) silt loam; weak thin platy structure; firm, slightly sticky and slightly plastic; many black (10YR 2/1) and common gray (2.5Y 5/1) irregular streaks; many thin ice lenses (less than 1 mm); common roots; moderately acid (pH 5.8); clear wavy boundary.
2Cjjf—12 to 21 inches (30 to 53 cm); permanently frozen dark gray (10YR 4/1) very channery silt loam; massive; firm, slightly sticky and slightly plastic; common black (10YR 2/1) and few gray (2.5Y 5/1) irregular streaks; 40 percent weathered schist fragments; moderately acid (pH 5.8); gradual wavy boundary.
2Crf—21 to 72 inches (53 to 183 cm); permanently frozen weathered schist bedrock.

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 40 cm)
Depth to permafrost: 10 to 30 inches (25 to 75 cm)
Depth to bedrock: 20 to 39 inches (50 to 100 cm)

O horizon:
Color—hue from 5YR to 10YR; value from 2 to 6; chroma from 1 to 8
Texture—peat or mucky peat
Reaction—extremely acid or very strongly acid

A horizon (when present):
Color—hue from 7.5YR to 2.5Y; value of 2 or 3; chroma of 1 or 2
Texture—silt loam or mucky silt loam
Reaction—extremely acid to strongly acid

ABjjf or Bjjfg horizon:
Color—hue from 10YR to 5Y; value from 2 to 4; chroma from 1 to 4
Coarse fragment content—0 to 35 percent
Channer content—0 to 35 percent
Flagstone content—0 to 5 percent
Reaction—extremely acid to slightly acid

2Cjjf horizon:
Color—hue of 10YR, 2.5Y, 5Y, or N; value from 4 to 6; chroma from 0 to 2
Coarse fragment content—40 to 60 percent
Channer content—0 to 60 percent
Flagstone content—0 to 15 percent
Reaction—extremely acid to slightly acid

Fairbanks Series

Taxonomic Classification

- Coarse-silty, mixed, superactive Typic Eutrocryepts

Setting

Depth class: deep and very deep
Drainage class: well drained
Landform: hills
Parent material: loess

Slope: 0 to 50 percent
Elevation: 500 to 2,000 feet (152 to 609 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 118—Fairbanks silt loam, 12 to 20 percent slopes
Location in survey area: W½, Section 28, T1N, R3E, Fairbanks Meridian

Typical Pedon

Fairbanks silt loam—on a 14 percent slope at 985 feet (300 m) elevation, under a white spruce, paper birch, and quaking aspen forest:

Oi—0 to 3 inches (0 to 8 cm); slightly decomposed forest litter.
A—3 to 9 inches (8 to 23 cm); very dark grayish brown (10YR 3/2) silt loam; weak medium platy structure parting to weak medium granular; very friable, nonsticky and nonplastic; many fine and very fine, and common medium and coarse roots; moderately acid (pH 5.8); clear wavy boundary.
Bw—9 to 30 inches (23 to 76 cm); light olive brown (2.5Y 5/4) silt loam; moderate medium platy structure; very friable, nonsticky and nonplastic; few fine and very fine roots; few fine prominent brown (7.5YR 4/4) redoximorphic concentrations; moderately acid (pH 5.8); clear smooth boundary.
BC—30 to 60 inches (76 to 152 cm); grayish brown (2.5Y 5/2) silt loam; weak medium platy structure; very friable, nonsticky and nonplastic; few fine and medium roots; few fine prominent brown (7.5YR 5/4) redoximorphic concentrations; slightly acid (pH 6.4); gradual smooth boundary.
C—60 to 72 inches (152 to 183 cm); light olive brown (2.5Y 5/3) silt loam; massive; very friable, nonsticky and nonplastic; common coarse prominent yellowish brown (10YR 5/6) redoximorphic concentrations; slightly acid (pH 6.5).

Range in Characteristics

Thickness of silty loess mantle: greater than 40 inches (> 102 cm)
Organic layer thickness: 1 to 6 inches (3 to 15 cm)

A horizon:
Color—hue of 7.5YR or 10YR; value of 3 or 4; chroma from 2 to 4
Reaction—moderately acid to neutral

Bw horizon:
Color—hue from 7.5YR to 2.5Y; value from 3 to 5; chroma from 2 to 4
Reaction—moderately acid to neutral

C horizon:
Color—hue from 10YR to 5Y; value from 4 to 6; chroma from 2 to 4
Reaction—moderately acid to neutral

Fubar Series

Taxonomic Classification

- Sandy-skeletal, mixed Typic Cryofluvents

Setting

Depth class: very shallow over sand and gravel
Drainage class: moderately well drained
Landform: flood plains and stream terraces
Parent material: alluvium
Slope: 0 to 2 percent
Elevation: 397 to 650 feet (121 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 124—Fubar-Piledriver complex, occasionally flooded
Location in survey area: NW¼, SW¼, Section 15, T3S, R3E, Fairbanks Meridian

Typical Pedon

Fubar silt loam—on a level plain at 460 feet (140 m) elevation, under a white spruce forest with alder understory:

Oi—0 to 2 inches (0 to 5 cm); black (7.5YR 2.5/1) slightly decomposed forest litter; strongly acid (pH 5.2); abrupt smooth boundary.
C1—2 to 10 inches (5 to 25 cm); olive brown (2.5Y 4/3) silt loam stratified with very fine sandy loam; moderate thin platy structure; very friable, nonsticky and nonplastic; few fine prominent

strong brown (7.5YR 5/6) redoximorphic concentrations; common medium and fine roots; slightly acid (pH 6.4); clear smooth boundary.

2C2—10 to 24 inches (25 to 60 cm); dark grayish brown (2.5Y 4/2) loamy fine sand stratified with fine sand; massive; very friable, nonsticky and nonplastic; slightly acid (pH 6.4); abrupt smooth boundary.

2C3—24 to 72 inches (60 to 183 cm); dark grayish brown (2.5Y 4/2) very gravelly loamy sand; massive; loose, nonsticky and nonplastic; 40 percent rounded gravel; neutral (pH 6.6).

Range in Characteristics

Organic layer thickness: 1 to 4 inches (2 to 10 cm)
Depth to sand and gravel: 1 to 10 inches (3 to 25 cm)

O horizon:
Color—hue from 5YR to 10YR; value of 2 or 3; chroma of 1 or 2
Texture—moderately or slightly decomposed plant material
Reaction—strongly acid to slightly acid

C horizon:
Color—hue of 2.5Y or 5Y; value 3 or 4; chroma of 2 or 3
Texture—silt loam with stratas of very fine sandy loam, loamy fine sand, and fine sand
Reaction—slightly acid to neutral

2C horizon:
Color—variegated
Texture—sand, fine sand, coarse sand or very to extremely gravelly sand or coarse sand
Gravel content—35 to 85 percent
Reaction—slightly acid or neutral

Gilmore Series

Taxonomic Classification

- Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts

Setting

Depth class: very shallow and shallow over weathered bedrock
Drainage class: well drained
Landform: hill crests and slopes
Parent material: loess over weathered bedrock
Slope: 0 to 70 percent
Elevation: 500 to 2,800 feet (152 to 853 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 to -2 degrees C)

Typical Pedon Location

Map unit in which located: 127—Gilmore silt loam, 12 to 20 percent slopes
Location in survey area: SW¼, NW¼, Section 24, T1N, R3E, Fairbanks Meridian

Typical Pedon

Gilmore silt loam—on a 15 percent slope at 1,082 feet (330 m) elevation, under a white spruce, paper birch, and quaking aspen forest:

Oi—0 to 3 inches (0 to 7 cm); very dark brown (10YR 2/2) partially decomposed forest litter and moss; many roots; mycelia; moderately acid (pH 5.8); abrupt smooth boundary.

A—3 to 6 inches (7 to 15 cm); dark brown (10YR 3/3) silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; many roots; moderately acid (pH 5.8); abrupt wavy boundary.

Bw—6 to 13 inches (15 to 33 cm); dark brown (10YR 4/3) silt loam; moderate medium platy structure; very friable, nonsticky and nonplastic; few roots; moderately acid (pH 5.8); clear smooth boundary.

2BC—13 to 16 inches (33 to 41 cm); olive brown (2.5Y 4/3) channery silt loam; massive; very friable, nonsticky and nonplastic; 20 percent schist channers, 2 percent schist flags; slightly acid (pH 6.3); gradual wavy boundary.

2Cr—16 to 72 inches (41 to 183 cm); weathered fractured schist bedrock.

Range in Characteristics

Organic layer thickness: 2 to 4 inches (5 to 11 cm)
Depth to bedrock: 8 to 24 inches (20 to 60 cm)

O horizon:
Color—hue of 7.5YR or 10YR; value from 2 to 3; chroma from 1 to 3
Texture—slightly or moderately decomposed plant material

Reaction—extremely acid to strongly acid

A horizon:
Color—hue of 7.5YR or 10YR; value from 2 to 4; chroma from 1 to 4
Reaction—strongly acid to slightly acid

Bw horizon:
Color—hue from 7.5YR to 2.5Y; value from 3 to 5; chroma from 3 to 6
Reaction—strongly acid to slightly acid

2BC horizon (when present):
Color—hue of 10YR or 2.5Y; value from 3 to 5; chroma from 3 to 6
Texture—silt loam or sandy loam
Coarse fragment content—20 to 75 percent
Channer content—20 to 75 percent
Flagstone content—0 to 15 percent
Reaction—strongly acid to slightly acid

Goldstream Series

Taxonomic Classification

- Coarse-silty, mixed, superactive, subgelic Typic Histoturbels

Setting

Depth class: shallow to moderately deep over permafrost
Drainage class: very poorly drained
Landform: toeslopes and valley floors
Parent material: organic matter over loess
Slope: 0 to 7 percent
Elevation: 500 to 1,200 feet (152 to 366 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 134—Goldstream peat, 3 to 7 percent slopes
Location in survey area: NE¼, NW¼, Section 11, T1N, R3E, Fairbanks Meridian

Typical Pedon

Goldstream peat—on a 4 percent slope at 625 feet (191 m) elevation, under stunted black spruce with low shrubs, sedge tussocks, and moss:

Oi—0 to 3 inches (0 to 8 cm); dark brown (7.5YR 3/2) peat; extremely acid (pH 4.4); clear smooth boundary.
Oe—3 to 9 inches (8 to 23 cm); black (10YR 2/1) mucky peat; extremely acid (pH 4.4); clear smooth boundary.
A—9 to 12 inches (23 to 30 cm); very dark grayish brown (2.5Y 3/2) mucky silt loam; massive; friable, nonsticky and nonplastic; many roots; very strongly acid (pH 4.7); gradual irregular boundary.
Bjjg/A—12 to 20 inches (30 to 50 cm); gray (5Y 5/1) silt loam (Bjjg) and very dark grayish brown (2.5Y 3/2) mucky silt loam (A); massive; friable, nonsticky and nonplastic; very strongly acid (pH 4.9); clear irregular boundary.
Cf—20 to 60 inches (50 to 152 cm); gray (5Y 5/1) permanently frozen silt loam.

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm)
Depth to permafrost: 14 to 24 inches (35 to 60 cm)

O horizon:
Color—hue from 10YR to 5Y; value from 2 to 4; chroma from 1 to 3
Texture—peat or mucky peat
Reaction—extremely or very strongly acid

A horizon:
Color—hue from 10YR to 5Y; value from 2 to 4; chroma from 1 to 3
Texture—silt loam or mucky silt loam
Reaction—very strongly or strongly acid

Bjjg/A horizon:
Color—hue of 10YR, 2.5Y, 5Y, or N; value from 4 to 6; chroma from 0 to 2
Texture—silt loam or mucky silt loam
Reaction—very strongly or strongly acid

Cf horizon:
Color—hue of 10YR, 2.5Y, 5Y, or N; value from 3 to 6; chroma from 0 to 3
Texture—silt loam
Reaction—very strongly or strongly acid

Histels

Taxonomic Classification

- Histels

Setting

Depth class: shallow to moderately deep over permafrost
Drainage class: very poorly drained
Landform: flood plains and terraces
Parent material: organic matter over alluvium and/or loess
Slope: 0 to 7 percent
Elevation: 400 to 1,200 feet (122 to 366 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Representative Pedon Location

Map unit in which located: 136—Histels
Location in survey area: NE¼, SE¼, Section 13, T1N, R2W, Fairbanks Meridian

Representative Pedon

Histels—on a level slope at 426 feet (130 m) elevation, under sparse black spruce, birch scrub, and sedge tussock:
Oi—0 to 12 inches (0 to 30 cm); black (10YR 2/1) peat; common medium and few fine roots; very strongly acid (pH 4.8); clear smooth boundary.
Oe—12 to 16 inches (30 to 42 cm); very dark brown (10YR 2/2) mucky peat; moderately acid (pH 5.6); abrupt smooth boundary.
Oef—16 to 26 inches (42 to 65 cm); very dark brown (10YR 2/2) permanently frozen mucky peat; moderately acid (pH 5.6); clear smooth boundary.
Cfg—26 to 36 inches (65 to 91 cm); very dark gray (2.5Y 3/1) permanently frozen silt loam; strongly acid (pH 5.5).

Range in Characteristics

Depth to permafrost: 16 to 24 inches (40 to 60 cm)
Organic layer thickness: greater than 16 inches (> 40 cm)

O horizon:
Color—hue from 5YR to 10YR; value from 2 to 5; chroma from 1 to 6
Texture—peat, mucky peat, or muck
Reaction—extremely acid to moderately acid

Cg horizon (when present):
Color—hue of 10YR or 2.5Y; value from 3 to 5; chroma of 1 or 2
Texture—silt loam, mucky silt loam, silty clay loam or loamy fine sand
Reaction—moderately acid or slightly acid

Histic Cryaquepts

Taxonomic Classification

- Histic Cryaquepts

Setting

Depth class: very deep
Drainage class: poorly drained
Landform: depressions on terraces
Parent material: organic material over loess or loess reworked by water
Slope: 0 to 3 percent
Elevation: 500 to 1,200 feet (152 to 366 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Representative Pedon Location

Map unit in which located: 182—Typic Cryaquent, Histic Cryaquept, and Terric Cryofibrist soils
Location in survey area: UTM zone 6, 498818 m N, 7173649 m E

Representative Pedon

Histic Cryaquepts—on a level slope at 585 feet (178 m) elevation, under sedges:

Oa—0 to 13 inches (0 to 32 cm); very dark brown (7.5YR 2.5/2) muck; many very fine and fine roots; very strongly acid (pH 5.0); abrupt smooth boundary.
C—13 to 30 inches (32 to 75 cm); olive brown (2.5Y 4/3) silt loam; massive; friable, slightly sticky and slightly plastic; common medium distinct grayish brown (2.5Y 5/2) mottles; strongly acid (pH 5.4); gradual smooth boundary.

Cg—30 to 72 inches (75 to 183 cm); dark grayish brown (2.5Y 4/2) silt loam; massive; friable, slightly sticky and slightly plastic; many medium prominent strong brown (7.5YR 4/6) mottles; moderately acid (pH 5.6).

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm)

O Horizon:
Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3
Texture—mucky peat or muck
Reaction—very strongly acid to moderately acid

C horizon:
Color—value of 3 or 4; chroma from 2 to 4
Texture—silt loam or very fine sandy loam
Reaction—strongly acid to moderately acid

Cg horizon:
Color—hue of 2.5Y or 5Y; value of 3 or 4; chroma of 1 or 2
Texture—silt loam with strata of very fine sand
Reaction—strongly acid to slightly acid

Jarvis Series

Taxonomic Classification

- Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Typic Cryofluvents

Setting

Depth class: moderately deep to sand and gravel
Drainage class: well drained
Landform: flood plains
Parent material: alluvium
Slope: 0 to 2 percent
Elevation: 400 to 650 feet (122 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 138—Jarvis-Chena complex

Location in survey area: UTM zone 6, 495247 m E, 7168290 m N

Typical Pedon

Jarvis very fine sandy loam—on a level slope at 545 feet (166 m) elevation, under a paper birch and white spruce forest:

Oe/C—0 to 3 inches (0 to 8 cm); black (10YR 2/1) moderately decomposed plant material and dark grayish brown (2.5Y 4/2) very fine sandy loam; common very fine to coarse roots; moderately acid (pH 5.6); clear wavy boundary.
C1—3 to 6 inches (8 to 15 cm); olive brown (2.5Y 4/3) and olive gray (5Y 5/2) very fine sandy loam; massive; very friable, nonsticky and nonplastic; few very fine and medium roots; common medium distinct dark yellowish brown (10YR 4/6) redoximorphic concentrations; slightly acid (pH 6.4); clear wavy boundary.
C2—6 to 16 inches (15 to 41 cm); grayish brown (2.5Y 5/2) and dark yellowish brown (10YR 4/6) stratified fine sand and very fine sand; massive; very friable, nonsticky and nonplastic; few very fine and medium roots; few medium prominent gray (5Y 6/1) redoximorphic depletions; neutral (pH 7.2); gradual smooth boundary.
C3—16 to 24 inches (41 to 61 cm); grayish brown (2.5Y 5/2) stratified very fine sandy loam and fine sand; massive; very friable, nonsticky and nonplastic; few very fine and fine roots; slightly alkaline (pH 7.4); abrupt smooth boundary.
2C4—24 to 72 inches (61 to 183 cm); gray (5Y 5/1) sand; massive; loose, nonsticky and nonplastic; 10 percent gravel; slightly acid (pH 6.4).

Range in Characteristics

Organic layer thickness: 1 to 4 inches (3 to 10 cm)
Depth to sand and gravel: 13 to 40 inches (33 to 102 cm)
Note: Organic carbon decreases irregularly with depth; thin buried organic horizons may occur throughout the profile.

Oe/C horizon (C material may not be present):
Color—O material: hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 or 2—C material: hue of 2.5Y or 5Y; value from 3 to 5; chroma of 1 or 2
Texture—moderately decomposed and slightly decomposed forest litter, mixed in some pedons with very fine sandy loam or silt loam

Reaction—very strongly acid to neutral

C horizon:
Color—hue from 10YR to 5Y; value of 4 or 5; chroma of 1 to 6
Texture—stratas of very fine sandy loam, silt loam, loamy fine sand, fine sand, or sand
Gravel content—0 to 15 percent
Reaction—slightly acid to slightly alkaline

2C horizon:
Color—hue from 10YR to 5Y; value from 2 to 6; chroma from 1 to 4
Texture—sand or loamy sand
Coarse fragment content—35 to 70 percent
Gravel content—25 to 60 percent
Cobble content—10 to 30 percent
Reaction—slightly acid to slightly alkaline

Lemeta Series

Taxonomic Classification

- Euic, subgelic Typic Fibristels

Setting

Depth class: Shallow to moderately deep over permafrost
Drainage class: very poorly drained
Landform: fens on terraces
Parent materials: organic matter
Slope: 0 to 1 percent
Elevation: 400 to 900 feet (129 to 290 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 140—Lemeta peat
Location in survey area: SE¼, SW¼, Section 32, T1N, R1W, Fairbanks Meridian

Typical Pedon

Lemeta peat—on a level slope at 420 feet (128 m) elevation under sparse black spruce, scrub birch, sphagnum moss, and sedge vegetation:

Oi1—0 to 5 inches (0 to 12 cm); brown (7.5YR 5/3) slightly decomposed moss peat; few very fine to coarse roots; extremely acid (pH 3.8); gradual smooth boundary.
Oi2—5 to 11 inches (12 to 28 cm); brown (7.5YR 5/3) slightly decomposed moss and lichen peat; few very fine to coarse roots; extremely acid (pH 4.0); clear wavy boundary.
Oi3—11 to 18 inches (28 to 45 cm); strong brown (7.5YR 5/6) slightly decomposed moss peat; extremely acid (pH 4.0); clear wavy boundary.
Oe—18 to 20 inches (45 to 50 cm); black (7.5YR 2.5/1) moderately decomposed mucky sedge peat; extremely acid (pH 4.0); clear smooth boundary.
Oef1—20 to 24 inches (50 to 60 cm); black (7.5YR 2.5/1) permanently frozen moderately decomposed mucky sedge peat; extremely acid (pH 4.0); gradual wavy boundary.
Oef2—24 to 60 inches (60 to 152 cm); black (10YR 2/1) permanently frozen moderately decomposed mucky sedge peat; 20 percent dark brown (7.5YR 3/3) coarse wood fragments; strongly acid (pH 5.4).

Range In Characteristics

Depth to permafrost: 14 to 24 inches (35 to 60 cm)
Organic layer thickness: greater than 40 inches (> 102 cm)

Oi horizons:
Color—hue of 7.5YR or 10YR; value from 2 to 5; chroma from 3 to 6
Reaction—extremely acid to moderately acid

Oe and Oef horizons:
Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3
Reaction—extremely acid to moderately acid

Oa horizons (when present):
Color—hue of 7.5Y or 10YR; value from 1 to 3; chroma from 1 to 3
Reaction—extremely acid to moderately acid

Liscum Series

Taxonomic Classification

- Coarse-loamy, mixed, superactive, nonacid Histic Cryaquepts

Setting

Depth class: deep or very deep over sand and gravel
Drainage class: very poorly drained
Landform: alluvial flats
Parent material: organic material over loess or alluvium
Slope: 0 to 2 percent
Elevation: 400 to 650 feet (121 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 141—Liscum-Noonku complex
Location in survey area: NE¼, SE¼, Section 5, T2S, R2E, Fairbanks Meridian

Typical Pedon

Liscum peat—on a level slope at 420 feet (128 m) elevation under sweet gail, leather leaf, and sedge vegetation:

Oi—0 to 4 inches (0 to 8 cm); dark brown (7.5YR 3/3) sedge peat; common very fine to medium roots; strongly acid (pH 5.4); clear wavy boundary.
Oa—4 to 11 inches (8 to 28 cm); black (7.5YR 2.5/1) muck; many very fine and fine roots; moderately acid (pH 5.6); clear irregular boundary.
A—11 to 15 inches (28 to 38 cm); black (10YR 2/1) mucky silt loam; many very fine and fine roots; moderately acid (pH 5.6); clear irregular boundary.
Bg—15 to 70 inches (38 to 178 cm); gray (5Y 5/1) stratified very fine sandy loam and silt loam; massive; friable; slightly sticky and slightly plastic; common medium prominent strong brown (7.5YR 5/6) redoximorphic concentrations and common medium prominent bluish gray (5PB 5/1) redoximorphic depletions; neutral (pH 6.6); gradual irregular boundary.
C—70 to 72 inches (178 to 183 cm); dark gray (N 4/) fine sandy loam; massive; friable; nonsticky and nonplastic; neutral (pH 7.2).

Range In Characteristics

Organic layer thickness: 8 to 16 inches (20 to 40 cm)

O horizon:
Color—hue from 5YR to 10YR; value from 2 to 4; chroma from 1 to 3
Texture—peat, mucky peat, or muck
Reaction—strongly acid to slightly acid

A horizon:
Color—hue of 10YR or 2.5Y; value of 2 or 3; chroma of 1 or 2
Texture—silt loam or sandy loam
Reaction—moderately acid to neutral

Bg horizon:
Color—hue of 2.5Y, 5Y, 5GY, or N; value of 4 or 5; chroma from 0 to 2
Texture—silt loam with strata of very fine sandy loam, loamy fine sand, and fine sand
Coarse fragment content—0 to 10 percent
Reaction—slightly acid or neutral

C horizon (when present):
Color—hue of 2.5Y, 5Y, 5GY, or N; value of 4 or 5; chroma from 0 to 3
Texture—fine sandy loam or sandy loam
Coarse fragment content—0 to 15 percent
Reaction—slightly acid or neutral

2C horizon (when present):
Color—variegated
Texture—sand or coarse sand
Coarse fragment content—15 to 50 percent
Gravel content—15 to 50 percent
Cobble content—0 to 10 percent
Reaction—slightly acid or neutral

Minto Series

Taxonomic Classification

- Coarse-silty, mixed, superactive Aquic Eutrocryepts

Setting

Depth class: very deep

Drainage class: moderately well drained
Landform: footslopes of hills
Parent material: loess or colluviated loess
Slope: 0 to 20 percent
Elevation: 500 to 2,000 feet (152 to 609 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 143—Minto silt loam, 3 to 7 percent slopes
Location in survey area: UTM zone 6, 496550 m E, 7196300 m N

Typical Pedon

Minto silt loam—on a 7 percent slope at 820 feet (250 m) elevation, under a paper birch and white spruce forest:

Oi—0 to 5 inches (0 to 13 cm); dark brown (7.5YR 3/2) slightly decomposed leaves, twigs, and moss; few fine and medium roots; very strongly acid (pH 5.0); abrupt smooth boundary.
A—5 to 9 inches (13 to 23 cm); very dark grayish brown (10YR 3/2) silt loam; moderate medium platy structure; friable, nonsticky and nonplastic; few fine and medium roots; moderately acid (pH 6.0); clear smooth boundary.
Bw—9 to 16 inches (23 to 41 cm); light olive brown (2.5Y 5/3) silt loam; moderate medium platy structure; friable, nonsticky and nonplastic; few fine roots; common medium faint grayish brown (2.5Y 5/2) redoximorphic depletions; moderately acid (pH 6.0); diffuse wavy boundary.
C—16 to 72 inches (41 to 183 cm); grayish brown (2.5Y 5/2) silt loam; massive; friable, nonsticky and nonplastic; common medium prominent brown (7.5YR 4/4) redoximorphic concentrations; slightly acid (pH 6.3).

Range in Characteristics

Organic layer thickness: 2 to 6 inches (5 to 15 cm)

O horizon:
Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 or 2
Texture—slightly or moderately decomposed plant material
Reaction—very strongly acid or strongly acid

A horizon:
Color—value of 2 or 3; chroma of 1 or 2
Texture—silt loam or very fine sandy loam
Reaction—moderately acid or slightly acid

B horizon:
Color—hue from 7.5YR to 2.5Y; value from 3 to 5; chroma from 2 to 5
Texture—silt loam or very fine sandy loam
Reaction—slightly acid to slightly alkaline

C horizon:
Color—hue of 2.5Y or 5Y; value from 3 to 6; chroma of 2 or 3
Texture—silt loam or very fine sandy loam
Reaction—slightly acid or neutral

Mosquito Series

Taxonomic Classification

- Coarse-loamy, mixed, superactive, subgelic Ruptic Histoturbels

Setting

Depth class: shallow to moderately deep over permafrost
Drainage class: very poorly drained
Landform: depressions on alluvial flats
Parent material: organic matter over alluvium
Slope: 0 to 2 percent
Elevation: 400 to 650 feet (121 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 149—Mosquito mucky peat
Location in survey area: SW¼, SW¼, Section 28, T1S, R1E, Fairbanks Meridian

Typical Pedon

Mosquito mucky peat—on a level plain at 432 feet (132 m) elevation, under dwarf birch and sedge vegetation:
Oi—0 to 15 inches (0 to 38 cm); very dark brown (10YR 2/2) peat; common very fine and few fine

and medium roots; moderately acid (pH 6.0); clear wavy boundary.

OA—15 to 18 inches (38 to 46 cm); dark brown (7.5YR 3/2) mucky silt loam; common very fine and few fine roots; moderately acid (pH 6.0); clear wavy boundary.

Cg—18 to 24 inches (46 to 60 cm); dark greenish gray (5BG 4/1) very fine sandy loam stratified with silt loam; massive; friable, nonsticky and nonplastic; few fine roots; few fine prominent strong brown (7.5YR 5/6) redoximorphic concentrations; slightly acid (pH 6.4); clear wavy boundary.

Cfg—24 to 60 inches (60 to 152 cm); dark greenish gray (5BG 4/1) permanently frozen very fine sandy loam stratified with silt loam; massive; friable, nonsticky and nonplastic; few fine roots; slightly acid (pH 6.4).

Range in Characteristics

Organic layer thickness: 9 to 16 inches (23 to 41 cm)
Depth to permafrost: 14 to 31 inches (36 to 80 cm)

O horizon:
Color—hue from 5YR to 10YR; value from 2 to 5; chroma from 1 to 3
Texture—peat, mucky peat, or muck
Reaction—strongly to slightly acid

Bg or Cg horizon:
Color—hue of 10YR, 2.5Y, 5Y, 5BG, or N; value of 4 or 5; chroma from 0 to 2
Texture—stratas of silt loam, silty clay loam, very fine sandy loam and loamy fine sand
Reaction—slightly acid or neutral

Bfg or Cfg horizon:
Color—hue of 10YR, 2.5Y, 5Y, 5BG, or N; value of 4 or 5; chroma from 0 to 2
Texture—stratas of silt loam, silty clay loam, very fine sandy loam and loamy fine sand
Reaction—slightly acid or neutral

Noonku Series

Taxonomic Classification

- Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents

Setting

Depth class: very deep
Drainage class: very poorly drained
Landform: sloughs and depressions on flood plains
Parent material: alluvium
Slope: 0 to 1 percent
Elevation: 400 to 650 feet (121 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 154—North Pole-Noonku complex
Location in survey area: NE¼, SW¼, Section 28, T1S, R1E, Fairbanks Meridian

Typical Pedon

Noonku silt loam—in a level slough at 465 feet (142 m) elevation, under grass and sedge vegetation with some willow and birch shrubs:

Oe—0 to 2 inches (0 to 4 cm); very dark brown (7.5YR 2.5/2) moderately decomposed sedge, moss and grass blades; many very fine to medium and common coarse roots; neutral (pH 7.0); abrupt smooth boundary.

A—2 to 6 inches (4 to 16 cm); dark brown (7.5YR 3/2) silt loam; massive; friable, nonsticky and nonplastic; common very fine and fine roots; slightly acid (pH 6.2); gradual smooth boundary.

Cg1—6 to 20 inches (16 to 50 cm); dark gray (2.5Y 4/1) very fine sandy loam stratified with silt loam; massive; friable; nonsticky and nonplastic; few very fine and fine roots; few coarse prominent dark brown (7.5YR 3/3) redoximorphic concentrations; neutral (pH 6.8); diffuse smooth boundary.

Cg2—20 to 28 inches (50 to 72 cm); greenish gray (5G 5/1) very fine sandy loam stratified with loamy fine sand; very friable; nonsticky and nonplastic; few fine prominent strong brown (7.5YR 5/8) redoximorphic concentrations; neutral (pH 6.8); diffuse smooth boundary.

Cg3—28 to 47 inches (72 to 120 cm); dark gray (N 4/) loamy fine sand stratified with very fine sandy loam; very friable; nonsticky and nonplastic; common medium prominent reddish yellow (7.5YR 7/8) redoximorphic

concentrations; neutral (pH 6.8); diffuse smooth boundary.

2Cg4—47 to 72 inches (120 to 183 cm); gray (N 5/) very gravelly loamy sand; massive; loose, nonsticky and nonplastic; few medium prominent grayish green (5G 5/2) redoximorphic depletions; neutral (pH 6.8).

Range in Characteristics

Organic layer thickness: 1 to 5 inches (3 to 13 cm)
Depth to sand and gravel: 40 to greater than 60 inches (101 to > 152 cm)
Note: Buried organic layers may occur at any depth.

O horizon:
Color—hue of 10YR or 7.5YR; value of 2 or 3; chroma from 1 to 3
Texture—slightly or moderately decomposed plant material
Reaction—slightly acid or neutral

A horizon:
Color—hue from 7.5YR to 2.5Y; value from 2 to 4; chroma from 1 to 2
Texture—silt loam or very fine sandy loam
Reaction—slightly acid or neutral

Cg horizon:
Color—hue of 2.5Y, 5Y, 10Y, 5GY, 5G, or N; value from 3 to 5; chroma from 0 to 2
Texture—silt loam or very fine sandy loam; thin layers of coarser material are occasionally present
Reaction—slightly acid to slightly alkaline

2Cg horizon (when present):
Color—hue of 2.5Y, 5Y, 5GY, 5G, or N; value from 2 to 5; chroma from 0 to 3
Texture—loamy sand, loamy fine sand, fine sand, or sand
Coarse fragment content—0 to 70 percent
Reaction—slightly acid to neutral

North Pole Series

Taxonomic Classification

- Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Aeric Cryaquepts

Setting

Depth class: moderately deep over sand and gravel
Drainage class: poorly drained
Landform: alluvial flats
Parent material: alluvium
Slope: 0 to 2 percent
Elevation: 400 to 650 feet (121 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 154—North Pole-Noonku complex
Location in survey area: NE¼, SW¼, Section 28, T1S, R1E, Fairbanks Meridian

Typical Pedon

North Pole very fine sandy loam—on a level plain at 540 feet (165 m) elevation, under a tamarack and black spruce forest with Labrador tea understory and moss ground cover:

Oi—0 to 2 inches (0 to 6 cm); very dark brown (7.5YR 2.5/2) slightly decomposed moss; common very fine to coarse roots; neutral (pH 7.0); abrupt smooth boundary.

Oe—2 to 4 inches (6 to 11 cm); black (2.5Y 2.5/1) moderately decomposed moss; common fine and very fine roots; neutral (pH 7.3); abrupt irregular boundary.

Bg/A—4 to 18 inches (11 to 45 cm); 60 percent light olive brown (2.5Y 5/3) and 40 percent very dark gray (10YR 3/1) very fine sandy loam stratified with very fine sand; weak thick platy structure; friable, nonsticky and nonplastic; common medium distinct gray (2.5Y 6/1) redoximorphic concentrations; few fine and very fine roots; neutral (pH 7.2); gradual smooth boundary.

Bw—18 to 39 inches (45 to 98 cm) light olive brown (2.5Y 5/4) very fine sandy loam stratified with silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent strong brown (7.5YR 5/6) redoximorphic concentrations; neutral (pH 7.2); gradual smooth boundary.

2C—39 to 49 inches (98 to 125 cm); olive brown (2.5Y 4/3) loamy fine sand; massive; very friable, nonsticky and nonplastic; neutral (pH 7.2); gradual smooth boundary.

2Cg—49 to 72 inches (125 to 183 cm); gray (2.5Y 5/1) sand; single grain; loose; nonsticky and nonplastic; neutral (pH 7.2).

Range in Characteristics

Organic layer thickness: 2 to 8 inches (5 to 20 cm)
Depth to sand and gravel: 10 to 40 inches (25 to 102 cm)

O horizon:
Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 or 2
Texture—slightly or moderately decomposed plant material
Reaction—very strongly acid to neutral

B horizon:
Color—hue from 10YR to 5Y; value from 3 to 5; chroma from 1 to 4
Texture—strata of very fine sandy loam, silt loam, loamy very fine sand, and loamy fine sand
Reaction—slightly acid or neutral

2C horizon:
Color—hue of 2.5Y or 5Y; value from 3 to 5; chroma from 1 to 3
Texture—sand or loamy sand
Coarse fragment content—0 to 70 percent
Gravel content—0 to 70 percent
Cobble content— 0 to 15 percent
Reaction—neutral or slightly alkaline

Peede Series

Taxonomic Classification

- Coarse-silty, mixed, superactive, nonacid Typic Cryaquents

Setting

Depth class: very deep
Drainage class: very poorly drained
Landform: depressions on flood plains
Parent material: alluvium
Slope: 0 to 1 percent
Elevation: 400 to 650 feet (121 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 155—Peede silt loam
Location in survey area: SW¼, SE¼, Section 23, T1S, R2W, Fairbanks Meridian

Typical Pedon

Peede silt loam—on a level depression at 420 feet (128 m) elevation, under grass and sedge vegetation with some willow shrubs:

Oe—0 to 2 inches (0 to 5 cm); very dark brown (7.5YR 2.5/2) moderately decomposed plant material; few fine and very fine roots; slightly acid (pH 6.1); abrupt smooth boundary.
A—2 to 5 inches (5 to 13 cm); very dark grayish brown (2.5Y 3/2) silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; common very fine and fine roots; neutral (pH 6.6); clear smooth boundary.
Cg1—5 to 10 inches (13 to 25 cm); grayish brown (2.5Y 5/2) silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; neutral (pH 6.6); diffuse smooth boundary.
Cg2—10 to 72 inches (25 to 183 cm); dark gray (N 4/) silt loam; massive; friable, slightly sticky and slightly plastic; neutral (pH 6.6).

Range in Characteristics

Organic layer thickness: 1 to 5 inches (3 to 13 cm)
Depth to sand and gravel: 40 to greater than 60 inches (101 to > 152 cm)
Note: Buried organic layers may occur at any depth.

O horizon:
Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3
Texture—moderately or well decomposed plant material
Reaction—slightly acid or neutral

Cg horizon:
Color—hue of 2.5Y, 5Y, 10Y, 5GY, or N; value from 3 to 5; chroma from 0 to 2
Texture—silt loam or very fine sandy loam
Reaction—slightly acid to slightly alkaline

2C horizon (when present):
Color—hue of 2.5Y or 5Y; value from 2 to 5; chroma from 1 to 3
Texture—loamy sand, loamy fine sand, fine sand, or sand
Coarse fragment content—0 to 70 percent
Reaction—slightly acid or neutral

Piledriver Series

Taxonomic Classification

- Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Aquic Cryofluvents

Setting

Depth class: moderately deep over sand and gravel
Drainage class: somewhat poorly drained
Landform: flood plains
Parent material: alluvium
Slope: 0 to 2 percent
Elevation: 400 to 650 feet (121 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 112—Eielson-Piledriver complex
Location in survey area: SW¼, SW¼, Section 23, T3S, R3E, Fairbanks Meridian

Typical Pedon

Piledriver very fine sandy loam—on a level plain at 545 feet (166 m) elevation, under a paper birch and white spruce forest:

Oi—0 to 3 inches (0 to 8 cm); dark brown (7.5YR 3/3) and very dark brown (7.5YR 2.5/2) slightly decomposed moss, leaves, twigs, and other woody debris; common fine and few medium roots; extremely acid (pH 4.1); clear wavy boundary.
C1—3 to 10 inches (8 to 25 cm); light olive brown (2.5Y 5/3) very fine sandy loam; weak medium platy structure parting to weak medium granular; friable, nonsticky and nonplastic; few fine roots; many medium, distinct gray redoximorphic depletions; slightly acid (pH 6.5); abrupt smooth boundary.
C2—10 to 15 inches (25 to 38 cm); light olive brown (2.5Y 5/3) silt loam; weak medium platy structure parting to weak medium granular; very friable, nonsticky and nonplastic; few fine roots; common medium distinct dark gray (5Y 4/1) redoximorphic depletions; common black (7.5YR 2.5/1) strata of organic material up to 1 inch (up to 3 cm) thick; neutral (pH 7.2); clear smooth boundary.
C3—15 to 33 inches (38 to 84 cm); grayish brown (2.5Y 5/2) loamy fine sand; weak thin platy structure; very friable, nonsticky and nonplastic; common medium faint gray (2.5Y 5/1) redoximorphic depletions; neutral (pH 7.3); clear smooth boundary.
2C4—33 to 72 inches (84 to 183 cm); grayish brown (2.5Y 5/2) extremely gravelly sand; single grain; loose, nonsticky and nonplastic; 70 percent rounded gravel; neutral (pH 7.3).

Range in Characteristics

Organic layer thickness: 1 to 6 inches (3 to 15 cm)
Depth to sand and gravel: 20 to 40 inches (50 to 102 cm)

O horizon:
Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3
Reaction—extremely acid to slightly acid

C horizon:
Color—hue from 10YR to 5Y; value from 3 to 5; chroma of 2 or 3
Texture—very fine sandy loam or silt loam with stratas of loamy very fine sand, and loamy fine sand
Reaction—slightly acid or neutral

2C horizon:
Color—hue of 2.5Y or 5Y; value from 3 to 5; chroma of 2 or 3
Coarse fragment content—15 to 70 percent
Gravel content—15 to 70 percent
Cobble content—0 to 10 percent
Reaction—slightly acid or neutral

Salchaket Series

Taxonomic Classification

- Coarse-loamy, mixed, superactive, nonacid Typic Cryofluvents

Setting

Depth class: very deep
Drainage class: well drained
Landform: flood plains
Parent material: alluvium
Slope: 0 to 2 percent
Elevation: 400 to 650 feet (122 to 198 meters)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 162—Salchaket very fine sandy loam
Location in survey area: NW¼, NW¼, Section 21, T1S, R2E, Fairbanks Meridian

Typical Pedon

Salchaket very fine sandy loam—on a level natural levee at 420 feet (128 m) elevation, under a paper birch and white spruce forest:

Oi—0 to 3 inches (0 to 7 cm); very dark brown (10YR 2/2) mat of slightly decomposed forest litter and moss; many very fine to coarse roots; strongly acid (pH 5.2); abrupt smooth boundary.
A—3 to 6 inches (7 to 14 cm); brown (10YR 4/3) very fine sandy loam stratified with silt loam; moderate medium platy structure; very friable, nonsticky and nonplastic; common very fine to coarse roots; few medium distinct dark grayish brown (2.5Y 4/2) redoximorphic depletions; strongly acid (pH 5.4); gradual smooth boundary.
C1—6 to 24 inches (14 to 62 cm); light olive brown (2.5Y 5/3) very fine sandy loam; weak medium platy structure; very friable, nonsticky and nonplastic; few fine roots; common medium prominent strong brown (7.5YR 5/6) redoximorphic concentrations; moderately acid (pH 5.6); gradual smooth boundary.
C2—24 to 45 inches (62 to 114 cm); grayish brown (2.5Y 5/2) stratified very fine sandy loam and fine sand; massive; very friable, nonsticky and nonplastic; few fine prominent strong brown (7.5YR 5/6) redoximorphic concentrations; neutral (pH 7.0); gradual smooth boundary.
2C3—45 to 72 (114 to 183 cm); variegated very gravely sand; loose; single grain; nonsticky and nonplastic; neutral (pH 6.7).

Range in Characteristics

Thickness of organic mat: 1 to 7 inches (3 to 18 cm)
Depth to sand and gravel 40 to greater than 60 inches (101 to > 152 cm)
Note: Organic carbon decreases irregularly with depth; thin buried organic horizons may occur throughout the profile.

O horizon:
Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 2 to 4
Texture—slightly decomposed to moderately decomposed plant material
Reaction—strongly to slightly acid

C horizon:
Color—hue of 2.5Y or 5Y; value of 4 or 5; chroma of 2 or 3
Texture—stratas of silt loam, loamy very fine sand, loamy fine sand, and fine sand
Reaction—slightly acid to slightly alkaline

2C horizon (when present):
Color—variegated
Gravel content—0 to 65 percent
Reaction—slightly acid to slightly alkaline

Saulich Series

Taxonomic Classification

- Coarse silty, mixed, superactive, subgelic Typic Histoturbels

Setting

Depth class: shallow or moderately deep over permafrost
Drainage class: very poorly drained
Landform: valley sides and hillslopes
Parent material: colluviated loess
Slope: 0 to 30 percent
Elevation: 500 to 1,300 feet (152 to 376 m)
Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 164—Saulich peat, 3 to 7 percent slopes
Location in survey area: UTM zone 6, 472550 m E, 7192900 m N

Typical Pedon

Saulich peat—on a 4 percent slope at 510 feet (155 m) elevation, under a sparse forest of black spruce with an understory of low shrubs:

Oi—0 to 9 inches (0 to 23 cm); very dark brown (7.5YR 2.5/3) peat mat of undecomposed sphagnum moss and roots; strongly acid (pH 5.2); clear smooth boundary.
Oe—9 to 16 inches (23 to 41 cm); black (7.5YR 2.5/1) and dark brown (7.5YR 3/2) mucky peat; mat of moderately decomposed moss; many roots; slightly acid (pH 6.4); abrupt smooth boundary.
Bg/A—16 to 21 inches (41 to 53 cm); very dark grayish brown (2.5Y 3/2) and black (7.5YR 2.5/1) silt loam; massive; friable, nonsticky and nonplastic; few roots; few medium prominent light brownish gray (10YR 6/2) redoximorphic depletions; neutral (pH 6.6); gradual boundary.
Cfg—21 to 72 inches (53 to 183 cm); dark grayish brown (2.5Y 4/2) permanently frozen silt loam; massive; many clear ice lenses; few medium prominent light brownish gray (10YR 6/2) redoximorphic depletions; neutral (pH 6.6).

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm)
Depth to permafrost: 16 to 24 inches (41 to 60 cm)

O horizon:
Color—hue of 7.5YR or 10YR; value from 2 to 4; chroma from 1 to 3
Texture—peat or mucky peat
Reaction—extremely acid to slightly acid

A horizon:
Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3
Texture—silt loam or mucky silt loam
Reaction—moderately acid to neutral

B horizon:
Color—hue from 10YR to 5Y; value from 3 to 5; chroma from 1 to 3
Texture—silt loam or very fine sandy loam
Reaction—moderately acid to neutral

C horizon:
Color—hue of 2.5Y or 5Y; value from 3 to 5; chroma from 1 to 3
Texture—silt loam or very fine sandy loam
Reaction—slightly acid or neutral

Steese Series

Taxonomic Classification

- Coarse-loamy, mixed, superactive Typic Eutrocryepts

Setting

Depth class: moderately deep over weathered bedrock
Drainage class: well drained
Landform: slopes and crests of hills
Parent material: loess over weathered schist bedrock
Slope range: 3 to 70 percent
Elevation: 750 to 2,800 feet (229 to 853 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 170—Steese silt loam, 7 to 12 percent slopes
Location in survey area: NW¼, NW¼, Section 14, T1N, R3E, Fairbanks Meridian

Typical Pedon

Steese silt loam—on an 8 percent slope at 885 feet (270 m) elevation, under a paper birch, white spruce, and quaking aspen forest with alder shrubs:

Oi—0 to 2 inches (0 to 5 cm); dark brown (7.5YR 3/2) slightly decomposed forest litter and moss;

many roots; mycelia at base of horizon; charcoal fragments; slightly acid (pH 6.1); abrupt smooth boundary.

A—2 to 5 inches (5 to 13 cm); brown (10YR 4/3) silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; many roots; common mica flakes; strongly acid (pH 5.3); abrupt wavy boundary.

Bw—5 to 20 inches (13 to 51 cm); light olive brown (2.5Y 5/4) silt loam; moderate medium platy structure; very friable, nonsticky and nonplastic; common medium and fine roots; few medium distinct yellowish brown (10YR 5/6) redoximorphic concentrations; few charcoal fragments; many mica flakes; moderately acid (pH 5.8); abrupt wavy boundary.

BC—20 to 27 inches (51 to 69 cm); brown (10YR 5/3) silt loam; weak thin platy structure; very friable, nonsticky and nonplastic; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; moderately acid (pH 5.8); clear wavy boundary.

2C—27 to 33 inches (69 to 84 cm); light olive brown (2.5Y 5/3) channery silt loam; massive; very friable; 20 percent schist channers; slightly acid (pH 6.3); clear wavy boundary.

2Cr—33 to 72 inches (84 to 183 cm); highly weathered schist bedrock.

Range in Characteristics

Organic layer thickness: 1 to 6 inches (3 to 15 cm)
Depth to unconsolidated bedrock: 20 to 40 inches (51 to 102 cm)

A horizon:
Color—hue of 7.5YR or 10YR; value of 3 or 4; chroma from 2 to 4
Reaction—strongly acid to slightly acid

Bw horizon:
Color—hue from 7.5YR to 2.5Y; value from 3 to 5; chroma from 3 to 6
Reaction—strongly acid to slightly acid

2C horizon:
Color—hue of 10YR or 2.5Y; value from 4 to 6; chroma from 3 to 6
Texture—silt loam, very fine sandy loam, or loamy fine sand
Coarse fragment content—15 to 40 percent
Channer content—15 to 40 percent
Flagstone content—0 to 5 percent
Reaction—strongly acid to slightly acid

Tanacross Series

Taxonomic Classification

- Coarse-loamy, mixed, superactive, subgelic Typic Histoturbels

Setting

Depth class: shallow to moderately deep over permafrost
Drainage class: poorly drained
Landform: alluvial terraces
Parent material: organic matter over alluvium
Slope: 0 to 2 percent
Elevation: 400 to 650 feet (122 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 179—Tanacross peat
Location in survey area: SE¼, NE¼, Section 27, T1S, R2E, Fairbanks Meridian

Typical Pedon

Tanacross peat—on a level plain at 650 feet (198 m) elevation, under a black spruce forest:

Oi—0 to 9 inches (0 to 22 cm); dark brown (7.5YR 3/2) moss peat; many very fine to coarse roots; very strongly acid (pH 4.8); clear smooth boundary.

A—9 to 11 inches (22 to 27 cm); black (2.5Y 2.5/1) mucky silt loam; massive; friable, slightly sticky and slightly plastic; few very fine to medium roots; slightly acid (pH 6.2); broken irregular boundary.

Bjjg—11 to 17 inches (27 to 42 cm); grayish brown (2.5Y 5/2) very fine sandy loam stratified with silt loam; massive; friable, slightly sticky and slightly plastic; many fine and medium strong brown (7.5YR 5/6) redoximorphic concentrations, common irregular very dark gray (2.5Y 3/1) streaks; slightly acid (pH 6.4); gradual wavy boundary.

Bjjfg—17 to 60 inches (42 to 152 cm); gray (2.5Y 5/1) and dark yellowish brown (10YR 4/6) permanently frozen very fine sandy loam

stratified with silt loam; massive; extremely firm, slightly sticky and slightly plastic; few irregular very dark gray (2.5Y 3/1) streaks; slightly acid (pH 6.2).

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm)
Depth to permafrost: 10 to 28 inches (25 to 71 cm)

O horizon:
Color—hue from 5YR to 10YR; value from 2 to 5; chroma from 1 to 6
Texture—peat, mucky peat, or muck
Reaction—extremely acid to strongly acid

B horizon:
Color—hue from 10YR to 5Y; value of 4 or 5; chroma from 1 to 6
Texture—stratas of silt loam, very fine sandy loam, fine sand or sand
Reaction—strongly acid to slightly acid

Bf horizon:
Color—hue from 10YR to 5Y; value of 4 or 5; chroma from 1 to 6
Texture—stratas of silt loam, very fine sandy loam, fine sand or sand
Reaction—strongly acid to slightly acid

Tanana Series

Taxonomic Classification

- Coarse-loamy, mixed, superactive, subgelic Typic Aquiturbels

Setting

Depth class: shallow to moderately deep over permafrost
Drainage class: poorly drained
Landform: terraces
Parent material: alluvium or loess over alluvium
Slope: 0 to 2 percent
Elevation: 400 to 650 feet (122 to 198 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 180—Tanana mucky silt loam
Location in survey area: NW¼, NW¼, Section 21, T1S, R2E, Fairbanks Meridian

Typical Pedon

Tanana mucky silt loam—on less than 1 percent slope at 470 feet (142 m) elevation, under a black spruce forest:

Oi—0 to 3 inches (0 to 8 cm); dark brown (7.5YR 3/2) mat of slightly decomposed moss and forest litter; many roots; mycelia; very strongly acid (pH 4.7); abrupt wavy boundary.
OA—3 to 5 inches (8 to 14 cm); black (10YR 2/1) mucky silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; common fine and medium roots; moderately acid (pH 5.6); clear broken boundary.
Bjjg—5 to 17 inches (14 to 44 cm); mixed olive brown (2.5Y 4/3) and strong brown (7.5YR 5/6) silt loam stratified with very fine sandy loam; weak medium platy structure; very friable, nonsticky and nonplastic; common medium faint mottles of grayish brown (2.5Y 5/2); common fine roots; common pockets and lenses of congeloturbate black (10YR 2/1); slightly acid (pH 6.5); clear broken boundary.
Cjjg—17 to 25 inches (44 to 63 cm); mixed gray (5Y 5/1) and olive brown (2.5Y 4/3) very fine sandy loam stratified with fine sandy loam; weak medium platy structure parting to weak thin platy; very friable, nonsticky and nonplastic; many coarse prominent mottles of strong brown (7.5YR 4/6); few fine roots; common pockets and lenses of congeloturbate black (10YR 2/1); few pockets of fibric organic material at contact with permafrost; slightly acid (pH 6.5); abrupt wavy boundary.
Cjjfg—25 to 72 inches (63 to 183 cm); mixed gray (5Y 5/1) and olive brown (2.5Y 4/3) permanently frozen silt loam stratified with sandy loam; massive, extremely firm, nonsticky and

nonplastic; many coarse prominent mottles of strong brown (7.5YR 4/6); many thin lenses of ice; few pockets of fibric organic material and wood; neutral (pH 6.7).

Range in Characteristics

Organic layer thickness: 2 to 8 inches (5 to 20 cm)
Depth to permafrost: 16 to 40 inches (41 to 101 cm)
Note: Buried A and O horizons may occur throughout the profile.

O horizon:
Color—hue from 5YR to 2.5Y; value from 2 to 4; chroma of 1 or 2
Texture—slightly decomposed to moderately decomposed plant material
Reaction—very strongly acid to slightly acid

A horizon (when present):
Color—hue from 5YR to 2.5Y; value from 2 to 4; chroma from 1 to 3
Texture—silt loam and very fine sandy loam
Reaction—moderately acid to neutral

Bg horizon:
Color—hue from 7.5YR to N; value from 3 to 5; chroma from 0 to 6
Texture—silt loam and very fine sandy loam, with occasional thin lenses of fine sandy loam and fine sand
Reaction—slightly acid or neutral

Cg and Cf horizon:
Color—hue from 10YR to N; value from 3 to 5; chroma from 0 to 4
Texture—silt loam and very fine sandy loam, with occasional thin lenses of sandy loam and fine sand
Coarse fragment content—0 to 5 percent
Reaction—slightly acid or neutral

Terric Cryofibrists

Taxonomic Classification

- Terric Cryofibrists

Setting

Depth class: very deep
Drainage class: very poorly drained
Landform: depressions on flood plains and terraces
Parent material: organic matter over alluvium
Slope: 0 to 1 percent
Elevation: 400 to 1,201 feet (122 to 366 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Representative Pedon Location

Map unit in which located: 136—Histels
Location in survey area: UTM zone 6, 456439 m N, 717151 m E

Representative Pedon

Terric Cryofibrist—in a level depression at 426 feet (130 m) elevation, under sedges:

Oi1—0 to 10 inches (0 to 25 cm); very dark brown (10YR 2/2) peat; many very fine to medium roots; moderately acid (pH 5.8); gradual smooth boundary.
C/Oi—10 to 12 inches (25 to 30 cm); very dark gray (10YR 3/1) peaty silt loam; massive; slightly sticky and slightly plastic; many very fine to medium roots; slightly acid (pH 6.2); gradual smooth boundary.
Oi2—12 to 28 inches (30 to 71 cm); very dark brown (10YR 2/2) peat; many very fine to medium roots; slightly acid (pH 6.2); clear smooth boundary.
Oa—28 to 40 inches (71 to 102 cm); black (10YR 2/1) muck; slightly acid (pH 6.2); clear smooth boundary.
Cg—40 to 72 inches (102 to 183 cm); black (5Y 2.5/1) mucky silty clay loam; massive; sticky and plastic; neutral (pH 6.6).

Range in Characteristics

Organic layer thickness: 16 to 51 inches (41 to 130 cm)
Note: Particle size class of mineral layers is coarse-silty or fine-silty.

O horizon:
Color—value of 2 or 3; chroma from 1 to 3
Reaction—very strongly acid to neutral

Cg horizon:
Color—hue of 2.5Y, 5Y, 10Y, 5GY, or N; value from 2 to 4; chroma from 0 to 2

Texture—silt loam, very fine sandy loam, silty clay loam, or mucky or peaty variants of these textures
Reaction—moderately acid to neutral

Typic Cryaquents

Taxonomic Classification

- Typic Cryaquents

Setting

Depth class: very deep
Drainage class: poorly drained
Landform: depressions on terraces, flood plains and footslopes
Parent material: alluvium, colluvium, loess or lacustrine sediment
Slope: 0 to 5 percent
Elevation: 400 to 1,200 feet (122 to 366 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Representative Pedon Location

Map unit in which located: 133—Goldstream peat, 0 to 3 percent slopes
Location in survey area: SE¼, NW¼, Section 3, T1N, R1W, Fairbanks Meridian

Representative Pedon

Typic Cryaquent—on a 3 percent slope at 750 feet (228 m) elevation, under scrub birch and sedge tussock:

Oi—0 to 5 inches (0 to 12 cm); very dark brown (10YR 2/2) sedge and moss peat; many very fine and fine roots; strongly acid (pH 5.2); abrupt smooth boundary.
Oe—5 to 7 inches (12 to 16 cm); black (10YR 2/1) mucky peat; many very fine and fine roots; very strongly acid (pH 5.0); abrupt wavy boundary.
A—7 to 10 inches (16 to 24 cm); very dark brown (7.5YR 2.5/3) silt loam; massive; friable, slightly sticky and slightly plastic; few very fine to medium roots; strongly acid (pH 5.2); abrupt smooth boundary.
ACjjg—10 to 24 inches (24 to 61 cm); dark grayish brown (2.5Y 4/2) silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent brown (7.5YR 4/4) redoximorphic concentrations; many irregular black (7.5YR 2.5/1) streaks; few very fine and fine roots; moderately acid (pH 5.6); gradual wavy boundary.
Cg—24 to 72 inches (61 to 183 cm); gray (2.5Y 5/1) silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent strong brown (7.5YR 5/6) redoximorphic concentrations; moderately acid (pH 5.6).

Range in Characteristics

Organic layer thickness: 1 to 8 inches (3 to 20 cm)
Note: Particle size class is coarse-silty or coarse-loamy.

O Horizon:
Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3
Texture—peat, mucky peat, or muck
Reaction—moderately acid to neutral

A horizon (when present):
Color—hue from 7.5YR to 2.5Y; value of 2 or 3; chroma from 1 to 3
Texture—silt loam, silty clay loam
Reaction—very strongly acid to neutral

Cg horizon:
Color—hue of 2.5Y, 5Y, or N; value of 3 or 4; chroma of 1 or 2
Texture—silt loam, silty clay loam, or stratas of silt loam, very fine sand, loamy sand, or gravel
Coarse fragment content—0 to 30 percent
Reaction—moderately acid to neutral

2C horizon (when present):
Color—variegated
Texture—sand or fine sand
Coarse fragment content—0 to 50 percent
Gravel content—0 to 50 percent
Reaction—slightly acid to neutral

Typic Cryorthents

Taxonomic Classification

- Typic Cryorthents

Setting

Depth class: very deep
Drainage class: well drained
Landform: flood plains, terraces, and man-made features
Parent material: loamy or gravelly fill over alluvium
Slope: 0 to 7 percent
Elevation: 400 to 1,200 feet (122 to 366 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Representative Pedon Location

Map unit in which located: 184—Typic Cryorthents-Urban land complex
Location in survey area: UTM zone 6, 469107 m E, 7189193 m N

Representative Pedon

Typic Cryorthent—on a level flood plain at 450 feet (137 m) elevation, under a grass lawn:

A—0 to 3 inches (0 to 8 cm); very dark grayish brown (10YR 3/2) gravelly loamy very fine sand; weak fine granular structure; very friable, nonsticky and nonplastic; common very fine and fine roots; 25 percent gravel; neutral (pH 6.6); clear smooth boundary.
C1—3 to 30 inches (8 to 76 cm); light olive brown (2.5Y 5/3) silt loam stratified with very fine sandy loam, sand, and gravel; weak thin platy structure; very friable, nonsticky and nonplastic; few very fine roots; 15 percent gravel; neutral (pH 6.6); gradual smooth boundary.
2C2—30 to 63 inches (76 to 160 cm); light olive brown (2.5Y 5/3) very fine sandy loam stratified with silt loam; weak thin platy structure; friable, nonsticky and nonplastic; few fine faint gray (2.5Y 6/1) redoximorphic depletions; slightly alkaline (pH 7.5); abrupt smooth boundary.
2C3—63 to 72 inches (160 to 183 cm); light brownish gray (2.5Y 6/2) sand; single grain; loose, nonsticky and nonplastic; slightly alkaline (pH 7.5).

Range in Characteristics

Depth to alluvium: 20 to greater than 60 inches (51 to > 152 cm)
Note: Particle size class is coarse-loamy, loamy-skeletal, or sandy. Thin O horizons may be present in some pedons.

A horizon (when present):
Color—value from 2 to 4
Texture—very fine sandy loam and gravelly loamy very fine sand
Gravel content—0 to 35 percent

C horizon:
Color—value from 3 to 5; chroma from 2 to 4
Texture—stratas of loamy very fine sand, very fine sandy loam, loamy sand, and sandy loam
Gravel content—0 to 40 percent
Reaction—neutral to slightly alkaline

2C horizon:
Color—value from 3 to 5; chroma from 2 to 4
Texture—strata of sand, very fine sandy loam, loamy very fine sand, very fine sand, fine sand, and silt loam
Gravel content—0 to 50 percent
Reaction—neutral or slightly alkaline

Formation of the Soils

Soil is the unconsolidated mineral and organic material on the surface of the earth that serves as a natural medium for the growth of land plants (Soil Survey Staff, 1999). Soil formation is controlled by genetic and environmental factors of climate (including temperature and moisture effects), topography, parent material, and living organisms—all acting over a period of time. The influence of any one of these factors varies from place to place, and the interaction of all of them determines the kind of soil that forms (Jenny, 1941).

The soils of the Greater Fairbanks Area are weakly developed as a result of the cold climate and the relatively young age of the parent materials. Thus, soil properties such as particle size composition and clay mineralogy are largely determined by the properties of the parent material. Parent materials in this area include alluvium, bedrock, and loess. Alluvium (material deposited by water) consists of stratified fine sand and silt underlain at some depth by sand and gravel. The surface alluvium is Holocene in age and flood deposition still occurs. Loess, consisting of windblown silt, covers most unflooded surfaces and is many feet thick in the lowlands. Loess is Pleistocene and Holocene in age and loess deposition continues at present. Loess on lower hillslopes has been redeposited down slope from higher elevations. Metamorphic rocks (mostly schist) and other bedrock of Precambrian age underlie the loess on upper hillslopes (Péwé *et al*., 1966; Weber *et al*., 1978). The bedrock is highly weathered in some places, probably due to hydrothermal activity rather than soil formation.

The major soil-forming processes in the Greater Fairbanks Area are accumulation of organic matter at the surface, oxidation and reduction of iron, cryoturbation, and impacts from permafrost and high water tables. Organic matter accumulates on the surface because decomposition cannot keep pace with the annual addition of dead plant material. Decomposition is inhibited by cold temperatures and, in many places, by wetness and a consequent lack of soil oxygen. Nearly all surfaces, except where floods or humans frequently disturb them, have some surface organic layer. The thickest accumulations of surface organic matter occur on the coldest and wettest soils. For example, wet soils in depressions and in areas with permafrost have the thickest organic surface layer. The warmest and driest soils, which occur on hilltops and on sandy and gravelly flood plains, may have only an inch or two of surface organic matter.

Weathering of primary minerals in soils releases iron, which may be either oxidized or reduced depending on the availability of oxygen. In dry, well-aerated soils iron oxidizes to form a reddish Bw horizon. Bw horizons are best developed in the soils of hillslopes, such as Fairbanks and Steese soils, and are weak or absent in the young soils of flood plains, such as Salchaket and Jarvis soils. In the very wettest soils iron is reduced because of a lack of oxygen, resulting in grayish soil colors. Commonly, alternating wet and dry conditions result in both reduced (grayish) and oxidized (reddish) zones in the soil.

Cryoturbation results in contorted and broken horizons. Cryoturbation is common in soils with permafrost.

Permafrost has several important impacts on soil. Since permafrost is nearly impervious, water perches above the permafrost and saturates the soil. Some permafrost soils contain large amounts of ground ice, and subsidence can occur if surface disturbance results in warming of the soil. Permafrost soils on thick Pleistocene loess deposits (Bolio, Lemeta, Goldstream, Chatanika, Minto, and Histel soils) have the greatest amount of ground ice and hence the greatest risk of thaw subsidence.

The gravel deposits underlying the alluvial plain in the Greater Fairbanks Area are saturated with ground water. In soils such as Piledriver, Eielson, North Pole, and Fubar this ground water is high enough to occur in the soil profile and affect land use.

References

American Association of State Highway and Transportation Officials (AASHTO). 2000. Standard specifications for transportation materials and methods of sampling and testing. 20th edition, 2 volumes.

American Society for Testing and Materials (ASTM). 2001. Standard classification of soils for engineering purposes. ASTM Standard D 2487-00.

Colla, J.M. and R.E. Southwick. 1987. Efficient Land Clearing Techniques. University of Alaska Cooperative Extension Service publication A-00111.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Farr, Wilbur A. 1967. Growth and yield of well-stocked white spruce stands in Alaska. U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station, Institute of Northern Forestry, Research Paper PNW-53.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. February 24, 1995. Hydric soils of the United States.

Gregory, R.A., and P.M. Haack. 1965. Growth and yield of well-stocked aspen and birch stands in Alaska. U.S. Department of Agriculture, Forest Service, Northern Forest Experiment Station, Research Paper NOR-2.

Hurt, G.W., P.M. Whited, and R.F. Pringle, editors. Version 4.0, 1998. Field indicators of hydric soils in the United States.

Jenny, Hans. 1941. Factors of soil formation.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Péwé, T.L., C. Wahrhaftig, and F. Weber. 1966. Geologic map of the Fairbanks quadrangle, Alaska. U.S. Geological Survey, Miscellaneous Geological Investigations Map 1-455, scale 1:250,000.

Quenet, R.V., and G.H. Manning. 1990. Site index equations for black spruce and white spruce in the Yukon. Forestry Canada, Pacific and Yukon Region, Pacific Forestry Center, Information Report BC-X-317.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1998. Keys to soil taxonomy. 8th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture (USDA), Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

Weber, F.R., H.L. Foster, T.E.C. Keith, and C. Dusel-Bacon. 1978. Preliminary geologic map of the Big Delta quadrangle, Alaska. U.S. Geological Survey Open File Report 78-529A, scale 1:250,000.

Glossary

Ablation till. Loose, permeable till deposited during the final downwasting of glacial ice. Lenses of crudely sorted sand and gravel are common.

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvial cone. The material washed down the sides of mountains and hills by ephemeral streams and deposited at the mouth of gorges in the form of a moderately steep, conical mass descending equally in all directions from the point of issue.

Alluvial fan. The fanlike deposit of a stream where it issues from a gorge upon a plain or of a tributary stream near or at its junction with its main stream.

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

Alpha,alpha-dipyridyl. A dye that when dissolved in 1N ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction indicates a type of redoximorphic feature.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Aspect. The direction in which a slope faces.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Basal till. Compact glacial till deposited beneath the ice.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bedrock-controlled topography. A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

Boulders. Rock fragments larger than 2 feet (61 cm) in diameter.

Breast height. An average height of 4.5 feet (1.4 m) above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

Canopy. The leafy crown of trees or shrubs. (See Crown.)

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Channery soil material. Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 cm) along the longest axis. A single piece is called a channer.

Cirque. A semicircular, concave, bowllike area that has steep faces primarily resulting from glacial ice and snow abrasion.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Closed depression. A low area completely surrounded by higher ground and having no natural outlet.

Coarse fragments. Mineral or rock particles larger than 2 millimeters in diameter.

Coarse textured soil. Sand or loamy sand. Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 cm) in diameter.

Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 cm) in diameter.

Cobbly soil material. Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 cm) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

COLE (coefficient of linear extensibility). See Linear extensibility.

Colluvium. Soil material or rock fragments, or both, moved by creep, slide, or local wash and deposited at the base of steep slopes.

Complex slope. Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions. Cemented bodies with crude internal symmetry organized around a point, a line, or a plane. They typically take the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.

Congeloturbate. Soil material disturbed by frost action.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches (25 cm) and 40 or 80 inches (102 or 203 cm).

Corrosion. Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Cryoturbation (frost churning). The mixing of the soil resulting in irregular or broken horizons, organic matter accumulation on the permafrost table, and oriented rock fragments due to frost action.

Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Cutbanks cave (in tables). The walls of excavations

tend to cave in or slough.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches (152 cm) deep over bedrock; deep soils, 40 to 60 inches (102 to 152 cm); moderately deep, 20 to 40 inches (51 to 102 cm); shallow, 10 to 20 inches (25 to 51 cm); and very shallow, less than 10 inches (25 cm).

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the *Soil Survey Manual*.

Drainage, surface. Runoff, or surface flow of water, from an area.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Eolian soil material. Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Synonym: scarp.

Esker. A narrow, winding ridge of stratified gravelly and sandy drift deposited by a stream flowing in a tunnel beneath a glacier.

Fan terrace. A relict alluvial fan, no longer a site of active deposition, incised by younger and lower alluvial surfaces.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity, or capillary capacity*.

Fine textured soil. Sandy clay, silty clay, or clay.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 cm) long.

Flood plain. A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Fluvial. Of or pertaining to rivers; produced by river action, as a fluvial plain.

Foothill. A steeply sloping upland that has relief of as much as 1,000 feet (305 m) and fringes a mountain range or high-plateau escarpment.

Footslope. The position that forms the inner, gently inclined surface at the base of a hillslope. In profile, footslopes are commonly concave. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

Forb. Any herbaceous plant not a grass or a sedge.

Forest cover. All trees and other woody plants (underbrush) covering the ground in a forest.

Forest type. A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

Frost action (in tables). Freezing and thawing of soil moisture. Frost action can damage roads, buildings and other structures, and plant roots.

Fragipan. A loamy, brittle subsurface horizon low in

porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Glacial drift. Pulverized and other rock material transported by glacial ice and then deposited. Also, the sorted and unsorted material deposited by streams flowing from glaciers.

Glacial outwash. Gravel, sand, and silt, commonly stratified, deposited by glacial meltwater.

Glacial till. Unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice.

Glaciofluvial deposits. Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur as kames, eskers, deltas, and outwash plains.

Glaciolacustrine deposits. Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are interbedded or laminated.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 mm to 7.6 cm) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 cm) in diameter.

Ground ice. Term used to denote bodies of more or less clear ice in permanently frozen ground. Ground ice may occur as segregated ice, disseminated ice, and massive ice.

Ground water. Water filling all the unblocked pores of the material below the water table.

Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

Hill. A natural elevation of the land surface, rising as much as 1,000 feet (305 m) above surrounding lowlands, commonly of limited summit area and having a well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and is dependent on local usage.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Soft, consolidated bedrock beneath the soil.

R layer.—Consolidated bedrock beneath the

soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock formed by solidification from a molten or partially molten state. Major varieties include plutonic and volcanic rock. Examples are andesite, basalt, and granite.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2.....very low
0.2 to 0.4 .....low
0.4 to 0.75 .....moderately low
0.75 to 1.25 .....moderate
1.25 to 1.75 ..... moderately high
1.75 to 2.5 ..... high
More than 2.5 ..... very high

Intermittent stream. A stream, or reach of a stream, that flows for prolonged periods only when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Iron depletions. Low-chroma zones having a low content of iron and manganese oxide because of chemical reduction and removal, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic depletion.

Kame. An irregular, short ridge or hill of stratified glacial drift.

Karst (topography). The relief of an area underlain by limestone that dissolves in differing degrees, thus forming numerous depressions or small basins.

K_{sat}. Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Large stones (in tables). Rock fragments 3 inches (7.6 cm) or more across. Large stones adversely affect the specified use of the soil.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loess. Fine grained material, dominantly of silt-sized particles, deposited by wind.

Low strength. The soil is not strong enough to support loads.

Masses. Concentrations of substances in the soil matrix that do not have a clearly defined boundary with the surrounding soil material and cannot be removed as a discrete unit. Common compounds making up masses are calcium carbonate, gypsum or other soluble salts, iron oxide, and manganese oxide. Masses consisting of iron oxide or manganese oxide generally are considered a type of redoximorphic concentration.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement. Nearly all such rocks are crystalline.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minor component. A component of limited extent that may or may not be present.

Miscellaneous area. An area that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

Mollic epipedon. A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.

Moraine. An accumulation of earth, stones, and other debris deposited by a glacier. Some types are terminal, lateral, medial, and ground.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 in); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 in); and *coarse,* more than 15 millimeters (about 0.6 in).

Mountain. A natural elevation of the land surface, rising more than 1,000 feet (305 m) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range.

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules. Cemented bodies lacking visible internal structure. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up nodules. If formed in place, nodules of iron oxide or manganese oxide are considered types of redoximorphic concentrations.

Nose slope. A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent.

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter. Plant and animal residue in the soil in various stages of decomposition.

Outwash plain. A landform of mainly sandy or coarse textured material of glaciofluvial origin. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan*.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square m to 10 square m), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Permafrost. Layers of soil, or even bedrock, occurring in arctic or subarctic regions, in which a temperature below freezing has existed continuously for two or more years.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is

defined in the *Soil Survey Manual*. In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Extremely slow	0.0 to 0.01 inch
Very slow	0.01 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Potential native plant community. See Climax plant community.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Rangeland. Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Redoximorphic concentrations. Nodules, concretions, soft masses, pore linings, and other features resulting from the accumulation of iron or manganese oxide. An indication of chemical reduction and oxidation resulting from saturation.

Redoximorphic depletions. Low-chroma zones from which iron and manganese oxide or a combination of iron and manganese oxide and clay has been removed. These zones are indications of the chemical reduction of iron resulting from saturation.

Redoximorphic features. Redoximorphic concentrations, redoximorphic depletions, reduced matrices, a positive reaction to alpha,alpha-dipyridyl, and other features indicating the chemical reduction and oxidation of iron and manganese compounds resulting from saturation.

Reduced matrix. A soil matrix that has low chroma in situ because of chemically reduced iron (Fe II). The chemical reduction results from nearly continuous wetness. The matrix undergoes a change in hue or chroma within 30 minutes after exposure to air as the iron is oxidized (Fe III). A type of redoximorphic feature.

Relief. The elevations or inequalities of a land surface, considered collectively.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.

Riverwash. Unstable areas of sandy, silty, clayey, or gravelly sediments. These areas are flooded, washed, and reworked by rivers so frequently that they support little or no vegetation.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Saline soil. A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saprolite. Unconsolidated residual material underlying the soil and grading to hard bedrock below.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Sedimentary rock. Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Shale. Sedimentary rock formed by the hardening of a clay deposit.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shoulder. The position that forms the uppermost inclined surface near the top of a hillslope. It is a transition from backslope to summit. The surface is dominantly convex in profile and erosional in origin.

Side slope. A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. Sedimentary rock made up of dominantly silt-sized particles.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Nearly level	0 to 2 percent
Gently sloping	2 to 4 percent
Moderately sloping	4 to 8 percent
Strongly sloping	8 to 15 percent
Moderately steep	15 to 25 percent
Steep	25 to 45 percent
Very steep	More than 45 percent

Slope (in tables). Slope is great enough that special practices are requied to ensure satisfactory performance of the soil for a specific use.

Sloughed till. Water-saturated till that has flowed slowly downhill from its original place of deposit by glacial ice. It may rest on other till, on glacial outwash, or on a glaciolacustrine deposit.

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stone line. A concentration of coarse fragments in a soil. Generally, it is indicative of an old weathered surface. In a cross section, the line may be one fragment or more thick. It generally overlies material that weathered in place and is overlain by recent sediment of variable thickness.

Stones. Rock fragments 10 to 24 inches (25 to 60 cm) in diameter if rounded or 15 to 24 inches (38 to 60 cm) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summit. The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 cm). Frequently designated as the "plow layer," or the "Ap horizon."

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terminal moraine. A belt of thick glacial drift that generally marks the termination of important glacial advances.

Terrace. An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the sea.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and

clay. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Thermokarst. Subsidence of the ground caused by melting of ground ice.

Till plain. An extensive area of nearly level to undulating soils underlain by glacial till.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toeslope. The position that forms the gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Tuff. A compacted deposit that is 50 percent or more volcanic ash and dust.

Tussock. A small mound, typically 0.5 to 1 foot (15 to 30 cm) high, consisting of densely packed dead parts of sedges or grasses.

Upland. Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Valley fill. In glaciated regions, material deposited in stream valleys by glacial meltwater. In nonglaciated regions, alluvium deposited by heavily loaded streams.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Weathering. All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Tables

Table 1.—Temperature and Precipitation at Fairbanks, Alaska

Month	Temperature (Degrees F)						Precipitation (Inches)				
				2 years in 10 will have				2 years in 10 will have			
	Average daily maximum	Average daily minimum	Average	Max. temp. greater than	Min. temp. lower than	Average number of growing degree days*	Average	Less than	More than	Average number of days with 0.1 inch or more	Average total snowfall
January	-1.6	-18.5	-10.0	39	-53	0	0.47	0.17	0.71	1	8.8
February	7.2	-14.4	-3.6	42	-47	0	0.41	0.10	0.65	1	8.2
March	23.8	-1.6	11.1	48	-35	0	0.38	0.11	0.64	1	6.5
April	41.0	20.4	30.7	64	-11	0	0.33	0.11	0.50	0	3.8
May	59.3	38.0	48.6	78	21	197	0.61	0.26	0.91	1	0.5
June	70.1	49.5	59.8	88	37	594	1.37	0.69	1.96	3	0.0
July	72.3	52.5	62.4	88	42	695	1.85	1.11	2.52	4	0.0
August	66.3	47.2	56.8	84	32	520	1.96	0.98	2.81	5	0.0
September	54.8	36.2	45.5	73	19	71	0.95	0.32	1.47	3	1.0
October	32.0	18.1	25.0	57	-13	0	0.92	0.46	1.32	2	11.7
November	10.9	-5.6	2.6	40	-38	0	0.81	0.31	1.22	2	15.1
December	1.9	-14.7	-6.4	39	-49	0	0.86	0.27	1.39	2	14.9
Yearly:											
Average	36.5	17.3	26.9	—-	—-	—-	—-	——	——	—-	—-
Extreme	96	-62	—-	90	-55	—-	—-	——	——	—-	—-
Total	—-	—-	—-	—-	—-	2,077	10.91	8.25	13.30	25	70.4

Average number of days per year with at least 1 inch of snow on the ground: 191

*A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (Threshold: 40.0 degree F). It is calculated for the period between the last and first 28 degree F frost.

Table 2.—Probability of Frost at Fairbanks, Alaska

	Temperature		
Probability	24°F or lower	28°F or lower	32°F or lower
Last freezing temperature in spring:			
1 year in 10 later than—	May 1	May 13	May 25
2 year in 10 later than—	April 28	May 9	May 22
5 year in 10 later than—	April 22	May 2	May 15
First freezing temperature in fall:			
1 yr in 10 earlier than—	September 15	September 6	August 22
2 yr in 10 earlier than—	September 19	September 11	August 27
5 yr in 10 earlier than—	September 28	September 20	September 5

Table 3.—Growing Season at Fairbanks, Alaska

	Daily Minimum Temperature		
Probability	number of days > 24°F	number of days > 28°F	number of days > 32°F
9 years in 10	143	124	93
8 years in 10	148	130	99
5 years in 10	158	140	112
2 years in 10	168	151	125
1 year in 10	174	156	131

Table 4.—Acreage and Proportionate Extent of the Area

(An * under "Percent" indicates less than 0.1 percent)

Map symbol	Map unit name	Acres	Percent
101	Bolio peat	3,597	1.3
102	Bradway very fine sandy loam	190	*
103	Chatanika mucky silt loam, 0 to 3 percent slopes	8,535	3.2
104	Chatanika mucky silt loam, 3 to 7 percent slopes	9,294	3.4
105	Chatanika mucky silt loam, 7 to 12 percent slopes	1,291	0.5
106	Chatanika mucky silt loam, 12 to 20 percent slopes	41	*
107	Chatanika-Goldstream complex	8,081	3.0
108	Chena very fine sandy loam	166	*
109	Dumps, landfill	200	*
110	Dumps, mine	2,330	0.9
111	Eielson fine sandy loam	6,077	2.3
112	Eielson-Piledriver complex	6,872	2.5
113	Eielson-Tanana complex	1,317	0.5
114	Ester peat, 20 to 45 percent slopes	2,711	1.0
115	Ester peat, very steep	104	*
116	Fairbanks silt loam, 3 to 7 percent slopes	1,291	0.5
117	Fairbanks silt loam, 7 to 12 percent slopes	5,883	2.2
118	Fairbanks silt loam, 12 to 20 percent slopes	9,824	3.6
119	Fairbanks silt loam, 20 to 30 percent slopes	3,653	1.4
120	Fairbanks silt loam, 30 to 45 percent slopes	458	0.2
121	Fairbanks silt loams, strongly sloping and steep	755	0.3
122	Fairbanks-Steese complex, 12 to 20 percent slopes	178	*
123	Fairbanks-Steese complex, 20 to 30 percent slopes	695	0.3
124	Fubar-Piledriver complex, occasionally flooded	2,014	0.7
125	Gilmore silt loam, 3 to 7 percent slopes	293	0.1
126	Gilmore silt loam, 7 to 12 percent slopes	725	0.3
127	Gilmore silt loam, 12 to 20 percent slopes	1,064	0.4
128	Gilmore silt loam, 20 to 30 percent slopes	1,943	0.7
129	Gilmore silt loam, 30 to 45 percent slopes	1,362	0.5
130	Gilmore silt loam, 45 to 70 percent slopes	516	0.2
131	Gilmore-Ester complex, 12 to 70 percent slopes	930	0.3
132	Gilmore-Steese complex, 3 to 15 percent slopes	1,620	0.6
133	Goldstream peat, 0 to 3 percent slopes	11,523	4.3
134	Goldstream peat, 3 to 7 percent slopes	1,394	0.5
135	Goldstream-Histels complex, 0 to 3 percent slopes	159	*
136	Histels	1,710	0.6
137	Jarvis fine sandy loam	2,962	1.1
138	Jarvis-Chena complex	2,226	0.8
139	Jarvis-Salchaket complex	22,467	8.3
140	Lemeta peat	2,677	1.0
141	Liscum-Noonku complex	1,116	0.4
142	Minto silt loam, 0 to 3 percent slopes	110	*
143	Minto silt loam, 3 to 7 percent slopes	7,768	2.9
144	Minto silt loam, 7 to 12 percent slopes	6,258	2.3
145	Minto-Chatanika complex, 0 to 3 percent slopes	4,849	1.8
146	Minto-Chatanika complex, 3 to 7 percent slopes	4,704	1.7
147	Minto-Chatanika complex, 7 to 12 percent slopes	1,605	0.6
148	Minto-Chatanika complex, 12 to 20 percent slopes	220	*
149	Mosquito mucky peat	2,467	0.9
150	Mosquito-Noonku complex	1,081	0.4
151	Noonku very fine sandy loam	1,727	0.6
152	North Pole fine sandy loam	1,489	0.6
153	North Pole-Mosquito-Liscum complex	872	0.3
154	North Pole-Noonku complex	3,242	1.2
155	Peede silt loam	241	*
156	Peede-Mosquito complex	696	0.3
157	Piledriver very fine sandy loam	462	0.2
158	Piledriver-Eielson complex	4,421	1.6
159	Piledriver-Fubar complex	3,765	1.4
160	Pits, gravel	1,280	0.5
161	Pits, quarry	254	*
162	Riverwash	847	0.3
163	Salchaket very fine sandy loam	7,090	2.6
164	Salchaket-Typic Cryorthents complex	1,067	0.4
165	Saulich peat, 3 to 7 percent slopes	2,975	1.1
166	Saulich peat, 7 to 12 percent slopes	924	0.3
167	Saulich peat, 12 to 20 percent slopes	242	*
168	Saulich-Minto complex, 3 to 12 percent slopes	3,767	1.4
169	Saulich-Minto complex, 12 to 20 percent slopes	268	*
170	Steese silt loam, 3 to 7 percent slopes	130	*

Table 4. Acreage and Proportionate Extent of the Area--Continued

Map symbol	Map unit name	Acres	Percent
171	Steese silt loam, 7 to 12 percent slopes	1,124	0.4
172	Steese silt loam, 12 to 20 percent slopes	4,721	1.7
173	Steese silt loam, 20 to 30 percent slopes	8,286	3.1
174	Steese silt loam, 30 to 45 percent slopes	1,391	0.5
175	Steese silt loam, 45 to 70 percent slopes	13	*
176	Steese-Gilmore complex, 12 to 20 percent slopes	1,301	0.5
177	Steese-Gilmore complex, 20 to 30 percent slopes	1,471	0.5
178	Steese-Gilmore complex, 30 to 45 percent slopes	404	0.1
179	Steese-Gilmore complex, 45 to 70 percent slopes	122	*
180	Tanacross peat	2,000	0.7
181	Tanana mucky silt loam	13,263	4.9
182	Tanana-Mosquito complex	1,299	0.5
183	Typic Cryaquent, Histic Cryaquept, and Terric Cryofibrist soils	1,464	0.5
184	Typic Cryorthents, pit spoil	1,836	0.7
185	Typic Cryorthents-Urban land complex	2,119	0.8
186	Urban land	12,639	4.7
187	Water	21,342	7.9
	Total	269,860	100.0

Table 5. Engineering Index Properties

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
101:						
Bolio	0-12	Peat	PT	A-8	0-0	NP
	12-16	Mucky peat	PT	A-8	0-0	NP
	16-72	Permanently frozen mucky peat			0-0	NP
102:						
Bradway	0-7	Slightly decomposed plant material	PT	A-8	0-0	NP
	7-10	Mucky silt loam	ML, OL	A-5	40-50	NP-10
	10-26	Stratified very fine sandy loam to fine sand	ML, SM	A-4	25-30	NP-5
	26-72	Permanently frozen material			—	—
103:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	0-0	NP
	4-6	Mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			—	—
104:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	0-0	NP
	4-6	Mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			—	—
105:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	0-0	NP
	4-6	Mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			—	—
106:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	0-0	NP
	4-6	Mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			—	—
107:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	0-0	NP
	4-6	Mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			—	—
Goldstream	0-9	Peat, mucky peat	PT	A-8	0-0	NP
	9-12	Mucky silt loam	ML, OL	A-4, A-5	30-50	NP-10
	12-20	Silt loam	ML	A-4	25-35	NP-10
	20-72	Permanently frozen material			—	—
108:						
Chena	0-4	Slightly decomposed plant material	PT	A-8	0-0	NP
	4-9	Stratified fine sand to silt loam, fine sandy loam, fine sand	SM, ML	A-4	25-30	NP-5
	9-72	Coarse sand, sand, very gravelly sand	GP, SP	A-1	0-0	NP
109:						
Dumps, landfill	—	—	—	—	—	—
110:						
Dumps, mine	—	—	—	—	—	—
111:						
Eielson	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	ML, SM	A-4	25-30	NP-5
	71-72	Extremely gravelly sand, gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP

Table 5. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plas-ticity index
	In.				Pct.	
112:						
Eielson	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	ML, SM	A-4	25-30	NP-5
	71-72	Extremely gravelly sand, gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
Piledriver	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	15-33	Stratified sand to fine sand to very fine sandy loam	SM, ML	A-4, A-3	20-25	NP-5
	33-72	Sand, very gravelly sand	GP-GM, SP-SM	A-1	0-0	NP
113:						
Eielson	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	ML, SM	A-4	25-30	NP-5
	71-72	Extremely gravelly sand, gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
Tanana	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-6	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	6-25	Very fine sandy loam, stratified silt loam to loamy fine sand	ML	A-4	30-40	NP-10
	25-72	Permanently frozen material			---	---
114:						
Ester	0-9	Peat	PT	A-8	0-0	NP
	9-12	Permanently frozen mucky silt loam	ML	A-4	25-30	NP-5
	12-21	Permanently frozen very channery silt loam	GM	A-2, A-4	---	NP
	21-72	Permanently frozen weathered bedrock			---	---
115:						
Ester	0-9	Peat	PT	A-8	0-0	NP
	9-12	Permanently frozen mucky silt loam	ML	A-4	25-30	NP-5
	12-21	Permanently frozen very channery silt loam	GM	A-2, A-4	---	NP
	21-72	Permanently frozen weathered bedrock			---	---
116:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt loam, silt	ML	A-4	25-35	NP-10
117:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt loam, silt	ML	A-4	25-35	NP-10
118:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt loam, silt	ML	A-4	25-35	NP-10
119:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt loam, silt	ML	A-4	25-35	NP-10
120:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt loam, silt	ML	A-4	25-35	NP-10
121:						
Fairbanks, strongly sloping	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt loam, silt	ML	A-4	25-35	NP-10
Fairbanks, steep	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt loam, silt	ML	A-4	25-35	NP-10

Table 5. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plas-ticity index
	In.				Pct.	
122:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt loam, silt	ML	A-4	25-35	NP-10
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—	—
123:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt loam, silt	ML	A-4	25-35	NP-10
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—	—
124:						
Fubar	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-10	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	10-72	Sand, extremely gravelly sand, fine sand, very gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1	0-0	NP
Piledriver	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	15-33	Stratified sand to fine sand to very fine sandy loam	SM, ML	A-4, A-3	20-25	NP-5
	33-72	Sand, very gravelly sand	GP-GM, SP-SM	A-1	0-0	NP
125:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	—	—
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt loam, silt	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	—	NP
	19-72	Weathered bedrock			—	—
126:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	—	—
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt loam, silt	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	—	NP
	19-72	Weathered bedrock			—	—
127:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	—	—
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt loam, silt	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	—	NP
	19-72	Weathered bedrock			—	—
128:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	—	—
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt loam, silt	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	—	NP
	19-72	Weathered bedrock			—	—
129:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	—	—
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt loam, silt	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	—	NP
	19-72	Weathered bedrock			—	—

Table 5. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plas-ticity index
	In.				Pct.	
130:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	—-	—-
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt loam, silt	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	—-	NP
	19-72	Weathered bedrock			—-	—-
131:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	—-	—-
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt loam, silt	ML	A-4	25-35	NP-10
	12-19	Channery silt loam, very channery silt loam, extremely channery silt loam	GM	A-2, A-4	—-	NP
	19-72	Weathered bedrock			—-	—-
Ester	0-9	Peat	PT	A-8	0-0	NP
	9-12	Permanently frozen mucky silt loam	ML	A-4	25-30	NP-5
	12-21	Permanently frozen very channery silt loam	GM	A-2, A-4	—-	NP
	21-72	Permanently frozen weathered bedrock			—-	—-
132:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	—-	—-
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt loam, silt	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	—-	NP
	19-72	Weathered bedrock			—-	—-
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—-	—-
133:						
Goldstream	0-9	Peat, mucky peat	PT	A-8	0-0	NP
	9-12	Mucky silt loam	ML, OL	A-4, A-5	30-50	NP-10
	12-20	Silt loam	ML	A-4	25-35	NP-10
	20-72	Permanently frozen material			—-	—-
134:						
Goldstream	0-9	Peat, mucky peat	PT	A-8	0-0	NP
	9-12	Mucky silt loam	ML, OL	A-4, A-5	30-50	NP-10
	12-20	Silt loam	ML	A-4	25-35	NP-10
	20-72	Permanently frozen material			—-	—-
135:						
Goldstream	0-9	Peat, mucky peat	PT	A-8	0-0	NP
	9-12	Mucky silt loam	ML, OL	A-4, A-5	30-50	NP-10
	12-20	Silt loam	ML	A-4	25-35	NP-10
	20-72	Permanently frozen material			—-	—-
135:						
Histels	0-12	Peat	PT	A-8	0-0	NP
	12-17	Mucky peat	PT	A-8	0-0	NP
	17-26	Permanently frozen mucky peat			0-0	NP
	26-72	Permanently frozen material			—-	—-
136:						
Histels	0-12	Peat	PT	A-8	0-0	NP
	12-17	Mucky peat	PT	A-8	0-0	NP
	17-26	Permanently frozen mucky peat			0-0	NP
	26-72	Permanently frozen material			—-	—-
137:						
Jarvis	0-3	Moderately decomposed plant material	PT	A-8	0-0	NP
	3-6	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	6-24	Stratified sand to fine sand to very fine sandy loam	ML, SM	A-4, A-3	20-25	NP-5
	24-72	Very gravelly sand	GP-GM, SP-SM	A-1	0-0	NP

Table 5. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plas-ticity index
	In.				Pct.	
138:						
Jarvis	0-3	Moderately decomposed plant material	PT	A-8	0-0	NP
	3-6	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	6-24	Stratified sand to fine sand to very fine sandy loam	ML, SM	A-4, A-3	20-25	NP-5
	24-72	Very gravelly sand	GP-GM, SP-SM	A-1	0-0	NP
Chena	0-4	Slightly decomposed plant material	PT	A-8	0-0	NP
	4-9	Stratified fine sand to silt loam, fine sandy loam, fine sand	SM, ML	A-4	25-30	NP-5
	9-72	Coarse sand, sand, very gravelly sand	GP, SP	A-1	0-0	NP
139:						
Jarvis	0-3	Moderately decomposed plant material	PT	A-8	0-0	NP
	3-6	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	6-24	Stratified sand to fine sand to very fine sandy loam	ML, SM	A-4, A-3	20-25	NP-5
	24-72	Very gravelly sand	GP-GM, SP-SM	A-1	0-0	NP
Salchaket	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-24	Very fine sandy loam	ML	A-4	25-30	NP-5
	24-45	Stratified silt loam to fine sand	ML, SM	A-4	25-30	NP-5
	45-72	Very gravelly sand	GP-GM, SP-SM	A-1	0-0	NP
140:						
Lemeta	0-20	Peat	PT	A-8	0-0	NP
	20-72	Permanently frozen mucky peat			0-0	NP
141:						
Liscum	0-3	Peat	PT	A-8	0-0	NP
	3-11	Muck	PT	A-8	0-0	NP
	11-15	Mucky silt loam	ML, OL	A-4, A-5	30-50	NP-10
	15-70	Stratified silt loam to loamy fine sand	CL, CL-ML, ML	A-4	0-30	NP-10
	70-72	Very gravelly sandy loam	SC-SM	A-2	0-15	NP-5
Noonku	0-2	Moderately decomposed plant material	PT	A-8	0-0	NP
	2-6	Silt loam	ML	A-4	20-35	NP-10
	6-47	Stratified sand to fine sand to very fine sandy loam	ML, SM	A-3, A-4	20-25	NP-5
	47-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
142:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	0-0	NP
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt loam, silt	ML	A-4	15-25	NP-5
	16-72	Silt loam, silt	ML	A-4	15-25	NP-5
143:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	0-0	NP
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt loam, silt	ML	A-4	15-25	NP-5
	16-72	Silt loam, silt	ML	A-4	15-25	NP-5
144:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	0-0	NP
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt loam, silt	ML	A-4	15-25	NP-5
	16-72	Silt loam, silt	ML	A-4	15-25	NP-5
145:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	0-0	NP
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt loam, silt	ML	A-4	15-25	NP-5
	16-72	Silt loam, silt	ML	A-4	15-25	NP-5
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	0-0	NP
	4-6	Mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			—	—

Table 5. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plas-ticity index
	In.				Pct.	
146:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	0-0	NP
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt loam, silt	ML	A-4	15-25	NP-5
	16-72	Silt loam, silt	ML	A-4	15-25	NP-5
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	0-0	NP
	4-6	Mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			—	—
147:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	0-0	NP
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt loam, silt	ML	A-4	15-25	NP-5
	16-72	Silt loam, silt	ML	A-4	15-25	NP-5
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	0-0	NP
	4-6	Mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			—	—
148:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	0-0	NP
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt loam, silt	ML	A-4	15-25	NP-5
	16-72	Silt loam, silt	ML	A-4	15-25	NP-5
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	0-0	NP
	4-6	Mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			—	—
149:						
Mosquito	0-18	Peat	PT	A-8	0-0	NP
	18-24	Silt loam, very fine sandy loam, stratified silt loam to loamy fine sand	ML	A-4	30-40	NP-5
	24-72	Permanently frozen material			—	—
150:						
Mosquito	0-18	Peat	PT	A-8	0-0	NP
	18-24	Silt loam, very fine sandy loam, stratified silt loam to loamy fine sand	ML	A-4	30-40	NP-5
	24-72	Permanently frozen material			—	—
Noonku	0-2	Moderately decomposed plant material	PT	A-8	0-0	NP
	2-6	Silt loam	ML	A-4	20-35	NP-10
	6-47	Stratified sand to fine sand to very fine sandy loam	ML, SM	A-3, A-4	20-25	NP-5
	47-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
151:						
Noonku	0-2	Moderately decomposed plant material	PT	A-8	0-0	NP
	2-6	Silt loam	ML	A-4	20-35	NP-10
	6-47	Stratified sand to fine sand to very fine sandy loam	ML, SM	A-3, A-4	20-25	NP-5
	47-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
152:						
North Pole	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-4	Highly decomposed plant material	PT	A-8	0-0	NP
	4-39	Stratified fine sand to silt loam	SM, ML	A-4	0-30	NP-10
	39-72	Very gravelly sand, extremely gravelly sand, gravelly coarse sand	GP-GM	A-1	0-0	NP
153:						
North Pole	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-4	Highly decomposed plant material	PT	A-8	0-0	NP
	4-39	Stratified fine sand to silt loam	SM, ML	A-4	0-30	NP-10
	39-72	Very gravelly sand, extremely gravelly sand, gravelly coarse sand	GP-GM	A-1	0-0	NP

Table 5. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plas-ticity index
	In.				Pct.	
153:						
Mosquito	0-18	Peat	PT	A-8	0-0	NP
	18-24	Silt loam, very fine sandy loam, stratified silt loam to loamy fine sand	ML	A-4	30-40	NP-5
	24-72	Permanently frozen material			—	—
Liscum	0-3	Peat	PT	A-8	0-0	NP
	3-11	Muck	PT	A-8	0-0	NP
	11-15	Mucky silt loam	ML, OL	A-4, A-5	30-50	NP-10
	15-70	Stratified silt loam to loamy fine sand	CL, CL-ML, ML	A-4	0-30	NP-10
	70-72	Gravelly sandy loam	SC-SM	A-4, A-2	0-15	NP-5
154:						
North Pole	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-4	Highly decomposed plant material	PT	A-8	0-0	NP
	4-39	Stratified fine sand to silt loam	SM, ML	A-4	0-30	NP-10
	39-72	Very gravelly sand, extremely gravelly sand, gravelly coarse sand	GP-GM	A-1	0-0	NP
Noonku	0-2	Moderately decomposed plant material	PT	A-8	0-0	NP
	2-6	Silt loam	ML	A-4	20-35	NP-10
	6-47	Stratified sand to fine sand to very fine sandy loam	ML, SM	A-3, A-4	20-25	NP-5
	47-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
155:						
Peede	0-2	Moderately decomposed plant material	PT	A-8	0-0	NP
	2-72	Silt loam	ML	A-4	20-35	NP-10
156:						
Peede	0-2	Moderately decomposed plant material	PT	A-8	0-0	NP
	2-72	Silt loam	ML	A-4	20-35	NP-10
Mosquito	0-18	Peat	PT	A-8	0-0	NP
	18-24	Silt loam, very fine sandy loam, stratified silt loam to loamy fine sand	ML	A-4	30-40	NP-5
	24-72	Permanently frozen material			—	—
157:						
Piledriver	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	15-33	Stratified sand to fine sand to very fine sandy loam	SM, ML	A-4, A-3	20-25	NP-5
	33-72	Sand, very gravelly sand	GP-GM, SP-SM	A-1	0-0	NP
158:						
Piledriver	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	15-33	Stratified sand to fine sand to very fine sandy loam	SM, ML	A-4, A-3	20-25	NP-5
	33-72	Sand, very gravelly sand	GP-GM, SP-SM	A-1	0-0	NP
Eielson	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	ML, SM	A-4	25-30	NP-5
	71-72	Extremely gravelly sand, gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
159:						
Piledriver	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	15-33	Stratified sand to fine sand to very fine sandy loam	SM, ML	A-4, A-3	20-25	NP-5
	33-72	Sand, very gravelly sand	GP-GM, SP-SM	A-1	0-0	NP
Fubar	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-10	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	10-72	Sand, extremely gravelly sand, fine sand, very gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1	0-0	NP
160:						
Pits, gravel	—	—	—	—	—	—
161:						
Quarry pits	—	—	—	—	—	—

Table 5. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plas-ticity index
	In.				Pct.	
162:						
Riverwash	—	—	—	—	—	—
163:						
Salchaket	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-24	Very fine sandy loam	ML	A-4	25-30	NP-5
	24-45	Stratified silt loam to fine sand	ML, SM	A-4	25-30	NP-5
	45-72	Very gravelly sand	GP-GM, SP-SM	A-1	0-0	NP
164:						
Salchaket	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-24	Very fine sandy loam	ML	A-4	25-30	NP-5
	24-45	Stratified silt loam to fine sand	ML, SM	A-4	25-30	NP-5
	45-72	Very gravelly sand	GP-GM, SP-SM	A-1	0-0	NP
Typic Cryorthents	0-30	Stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam	GC-GM	A-2	0-15	NP-5
	30-63	Stratified fine sand to silt loam	SC-SM, ML	A-4	25-35	NP-10
	63-72	Very gravelly sand, extremely gravelly sand	SP-SM, GP-GM	A-1	0-0	NP
165:						
Saulich	0-16	Mucky peat, peat	PT	A-8	0-0	NP
	16-21	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	21-72	Permanently frozen material			—	—
166:						
Saulich	0-16	Mucky peat, peat	PT	A-8	0-0	NP
	16-21	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	21-72	Permanently frozen material			—	—
167:						
Saulich	0-16	Mucky peat, peat	PT	A-8	0-0	NP
	16-21	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	21-72	Permanently frozen material			—	—
168:						
Saulich	0-16	Mucky peat, peat	PT	A-8	0-0	NP
	16-21	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	21-72	Permanently frozen material			—	—
Minto	0-5	Slightly decomposed plant material	PT	A-8	0-0	NP
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt loam, silt	ML	A-4	15-25	NP-5
	16-72	Silt loam, silt	ML	A-4	15-25	NP-5
169:						
Saulich	0-16	Mucky peat, peat	PT	A-8	0-0	NP
	16-21	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	21-72	Permanently frozen material			—	—
Minto	0-5	Slightly decomposed plant material	PT	A-8	0-0	NP
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt loam, silt	ML	A-4	15-25	NP-5
	16-72	Silt loam, silt	ML	A-4	15-25	NP-5
170:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—	—
171:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—	—

Table 5. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plas-ticity index
	In.				Pct.	
172:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—-	—-
173:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—-	—-
174:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—-	—-
175:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—-	—-
176:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—-	—-
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	—-	—-
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt loam, silt	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	—-	NP
	19-72	Weathered bedrock			—-	—-
177:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—-	—-
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	—-	—-
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt loam, silt	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	—-	NP
	19-72	Weathered bedrock			—-	—-
178:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—-	—-
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	—-	—-
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt loam, silt	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	—-	NP
	19-72	Weathered bedrock			—-	—-

Table 5. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Liquid limit	Plasticity index
	In.				Pct.	
179:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	0-0	NP
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	GM	A-2, A-4	0-0	NP
	33-72	Weathered bedrock			—	—
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	—	—
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt loam, silt	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	—	NP
	19-72	Weathered bedrock			—	—
180:						
Tanacross	0-9	Peat	PT	A-8	0-0	NP
	9-11	Mucky silt loam	ML, OL	A-4	30-40	NP-10
	11-17	Stratified fine sandy loam to silt loam	ML	A-4	0-40	NP-10
	17-72	Permanently frozen material			—	—
181:						
Tanana	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-6	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	6-25	Very fine sandy loam, stratified silt loam to loamy fine sand	ML	A-4	30-40	NP-10
	25-72	Permanently frozen material			—	—
182:						
Tanana	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-6	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	6-25	Very fine sandy loam, stratified silt loam to loamy fine sand	ML	A-4	30-40	NP-10
	25-72	Permanently frozen material			—	—
Mosquito	0-18	Peat	PT	A-8	0-0	NP
	18-24	Silt loam, very fine sandy loam, stratified silt loam to loamy fine sand	ML	A-4	30-40	NP-5
	24-72	Permanently frozen material			—	—
183:						
Typic Cryaquents	0-6	Moderately decomposed plant material	PT	A-8	0-0	NP
	6-72	Silt loam	ML	A-4	25-40	NP-10
Histic Cryaquepts	0-13	Mucky peat, muck	PT	A-8	0-0	NP
	13-30	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-10
	30-72	Very fine sandy loam, silt loam	ML, SM	A-4	25-35	NP-10
Terric Cryofibrists	0-28	Peat	PT	A-8	0-0	NP
	28-40	Muck	PT	A-8	0-0	NP
	40-72	Silt loam, very fine sandy loam, silty clay loam	CL, ML	A-5	30-45	NP-30
184:						
Typic Cryorthents	0-1	Slightly decomposed plant material	PT	A-8	0-0	NP
	1-49	Stratified fine sand to silt loam	ML, SC-SM	A-4	25-35	NP-10
	49-72	Very gravelly sand, extremely gravelly sand	GP-GM	A-1	0-0	NP
185:						
Typic Cryorthents, Fill	0-30	Stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam	GC-GM	A-2	0-15	NP-5
	30-63	Stratified fine sand to silt loam	SC-SM, ML	A-4	25-35	NP-10
	63-72	Very gravelly sand, extremely gravelly sand	SP-SM, GP-GM	A-1	0-0	NP
Urban land	—	—	—	—	—	—
186:						
Urban land	—	—	—	—	—	—
187:						
Water	—	—	—	—	—	—

Table 6. Engineering Sieve Data

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number— 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
101:											
Bolio	0-12	Peat	—	—	—	—	—	—	—	—	—
	12-16	Mucky peat	—	—	—	—	—	—	—	—	—
	16-72	Permanently frozen mucky peat	—	—	—	—	—	—	—	—	—
102:											
Bradway	0-7	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	7-10	Mucky silt loam	0	0	100	100	95-100	75-90	15-50	50-85	0-5
	10-26	Stratified very fine sandy loam to fine sand	0	0	95-100	95-100	85-95	40-65	45-80	10-50	5-10
	26-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
103:											
Chatanika	0-4	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-6	Mucky silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
104:											
Chatanika	0-4	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-6	Mucky silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
105:											
Chatanika	0-4	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-6	Mucky silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
106:											
Chatanika	0-4	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-6	Mucky silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
107:											
Chatanika	0-4	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-6	Mucky silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
Goldstream	0-9	Peat, mucky peat	—	—	—	—	—	—	—	—	—
	9-12	Mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	12-20	Silt loam	0	0	100	100	95-100	75-95	10-45	50-80	5-10
	20-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
108:											
Chena	0-4	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-9	Stratified fine sand to silt loam, fine sandy loam, fine sand	0	0	90-100	90-100	70-90	35-70	45-90	10-50	0-5
	9-72	Coarse sand, sand, very gravelly sand	0	0	45-95	30-90	15-65	0-15	85-100	0-15	0-5
109:											
Dumps, landfill	—	—	—	—	—	—	—	—	—	—	
110:											
Dumps, mine	—	—	—	—	—	—	—	—	—	—	
111:											
Eielson	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-49	Very fine sandy loam	0	0	100	100	90-100	65-75	50-77	13-45	5-10
	49-71	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-80	10-50	5-10
	71-72	Extremely gravelly sand, gravelly sand, very gravelly sand	0	15-30	50-80	30-80	20-30	5-10	86-100	0-14	0-5

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number— 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
112:											
Eielson	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-49	Very fine sandy loam	0	0	100	100	90-100	65-75	50-77	13-45	5-10
	49-71	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-80	10-50	5-10
	71-72	Extremely gravelly sand, gravelly sand, very gravelly sand	0	15-30	50-80	30-80	20-30	5-10	86-100	0-14	0-5
Piledriver	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-15	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	70-100	40-95	45-80	10-50	5-10
	15-33	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	40-100	5-55	45-80	10-50	0-10
	33-72	Sand, very gravelly sand	0	0	55-90	25-85	10-60	0-20	85-100	0-15	0-5
113:											
Eielson	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-49	Very fine sandy loam	0	0	100	100	90-100	65-75	50-77	13-45	5-10
	49-71	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-80	10-50	5-10
	71-72	Extremely gravelly sand, gravelly sand, very gravelly sand	0	15-30	50-80	30-80	20-30	5-10	86-100	0-14	0-5
Tanana	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	6-25	Very fine sandy loam, stratified silt loam to loamy fine sand	0	0	100	100	85-100	65-90	45-80	10-50	5-10
	25-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
114:											
Ester	0-9	Peat	—	—	—	—	—	—	—	—	—
	9-12	Permanently frozen mucky silt loam	0	0	100	100	90-100	70-90	11-45	50-80	5-10
	12-21	Permanently frozen very channery silt loam	0	35-45	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	21-72	Permanently frozen weathered bedrock	—	—	—	—	—	—	—	—	—
115:											
Ester	0-9	Peat	—	—	—	—	—	—	—	—	—
	9-12	Permanently frozen mucky silt loam	0	0	100	100	90-100	70-90	11-45	50-80	5-10
	12-21	Permanently frozen very channery silt loam	0	35-45	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	21-72	Permanently frozen weathered bedrock	—	—	—	—	—	—	—	—	—
116:											
Fairbanks	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-45	50-80	5-10
	30-72	Silt loam, silt	0	0	100	100	90-100	80-95	0-50	50-100	0-10
117:											
Fairbanks	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-45	50-80	5-10
	30-72	Silt loam, silt	0	0	100	100	90-100	80-95	0-50	50-100	0-10
118:											
Fairbanks	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-45	50-80	5-10
	30-72	Silt loam, silt	0	0	100	100	90-100	80-95	0-50	50-100	0-10
119:											
Fairbanks	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-45	50-80	5-10
	30-72	Silt loam, silt	0	0	100	100	90-100	80-95	0-50	50-100	0-10
120:											
Fairbanks	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-45	50-80	5-10
	30-72	Silt loam, silt	0	0	100	100	90-100	80-95	0-50	50-100	0-10

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number— 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
121:											
Fairbanks, strongly sloping	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-45	50-80	5-10
	30-72	Silt loam, silt	0	0	100	100	90-100	80-95	0-50	50-100	0-10
Fairbanks, steep	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-45	50-80	5-10
	30-72	Silt loam, silt	0	0	100	100	90-100	80-95	0-50	50-100	0-10
122:											
Fairbanks	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-45	50-80	5-10
	30-72	Silt loam, silt	0	0	100	100	90-100	80-95	0-50	50-100	0-10
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
123:											
Fairbanks	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-30	Silt loam	0	0	100	100	90-100	80-90	10-45	50-80	5-10
	30-72	Silt loam, silt	0	0	100	100	90-100	80-95	0-50	50-100	0-10
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	30-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
124:											
Fubar	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-10	Stratified fine sand to silt loam, very fine sandy loam	0	0	95-100	90-100	50-100	25-80	45-75	20-50	5-10
	10-72	Sand, extremely gravelly sand, fine sand, very gravelly coarse sand	0	0	48-90	15-85	15-35	0-10	85-100	0-15	0-5
Piledriver	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-15	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	70-100	40-95	45-80	10-50	5-10
	15-33	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	40-100	5-55	45-80	10-50	0-10
	33-72	Sand, very gravelly sand	0	0	55-90	25-85	10-60	0-20	85-100	0-15	0-5
125:											
Gilmore	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	6-12	Silt loam, silt	0	0	100	100	85-95	75-85	0-50	50-100	0-5
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	0-5
	19-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
126:											
Gilmore	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	6-12	Silt loam, silt	0	0	100	100	85-95	75-85	0-50	50-100	0-5
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	0-5
	19-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
127:											
Gilmore	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	6-12	Silt loam, silt	0	0	100	100	85-95	75-85	0-50	50-100	0-5
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	0-5
	19-72	Weathered bedrock	—	—	—	—	—	—	—	—	—

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number— 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
128:											
Gilmore	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	6-12	Silt loam, silt	0	0	100	100	85-95	75-85	0-50	50-100	0-5
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	0-5
	19-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
129:											
Gilmore	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	6-12	Silt loam, silt	0	0	100	100	85-95	75-85	0-50	50-100	0-5
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	0-5
	19-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
130:											
Gilmore	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	6-12	Silt loam, silt	0	0	100	100	85-95	75-85	0-50	50-100	0-5
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	0-5
	19-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
131:											
Gilmore	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	6-12	Silt loam, silt	0	0	100	100	85-95	75-85	0-50	50-100	0-5
	12-19	Channery silt loam, very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	0-5
	19-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
Ester	0-9	Peat	—	—	—	—	—	—	—	—	—
	9-12	Permanently frozen mucky silt loam	0	0	100	100	90-100	70-90	11-45	50-80	5-10
	12-21	Permanently frozen very channery silt loam	0	35-45	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	21-72	Permanently frozen weathered bedrock	—	—	—	—	—	—	—	—	—
132:											
Gilmore	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	6-12	Silt loam, silt	0	0	100	100	85-95	75-85	0-50	50-100	0-5
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	0-5
	19-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
133:											
Goldstream	0-9	Peat, mucky peat	—	—	—	—	—	—	—	—	—
	9-12	Mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	12-20	Silt loam	0	0	100	100	95-100	75-95	10-45	50-80	5-10
	20-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
134:											
Goldstream	0-9	Peat, mucky peat	—	—	—	—	—	—	—	—	—
	9-12	Mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	12-20	Silt loam	0	0	100	100	95-100	75-95	10-45	50-80	5-10
	20-72	Permanently frozen material	—	—	—	—	—	—	—	—	—

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number— 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
135:											
Goldstream	0-9	Peat, mucky peat	—	—	—	—	—	—	—	—	—
	9-12	Mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	12-20	Silt loam	0	0	100	100	95-100	75-95	10-45	50-80	5-10
	20-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
Histels	0-12	Peat	—	—	—	—	—	—	—	—	—
	12-17	Mucky peat	—	—	—	—	—	—	—	—	—
	17-26	Permanently frozen mucky peat	—	—	—	—	—	—	—	—	—
	26-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
136:											
Histels	0-12	Peat	—	—	—	—	—	—	—	—	—
	12-17	Mucky peat	—	—	—	—	—	—	—	—	—
	17-26	Permanently frozen mucky peat	—	—	—	—	—	—	—	—	—
	26-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
137:											
Jarvis	0-3	Moderately decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	50-100	0-100	45-80	10-50	5-10
	6-24	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	70-100	5-75	45-80	10-50	0-10
	24-72	Very gravelly sand	0	0	35-90	30-80	10-60	0-20	85-100	0-15	0-5
138:											
Jarvis	0-3	Moderately decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	50-100	0-100	45-80	10-50	5-10
	6-24	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	70-100	5-75	45-80	10-50	0-10
	24-72	Very gravelly sand	0	0	35-90	30-80	10-60	0-20	85-100	0-15	0-5
138:											
Chena	0-4	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-9	Stratified fine sand to silt loam, fine sandy loam, fine sand	0	0	90-100	90-100	70-90	35-70	45-90	10-50	0-5
	9-72	Coarse sand, sand, very gravelly sand	0	0	45-95	30-90	15-65	0-15	85-100	0-15	0-5
139:											
Jarvis	0-3	Moderately decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	50-100	0-100	45-80	10-50	5-10
	6-24	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	70-100	5-75	45-80	10-50	0-10
	24-72	Very gravelly sand	0	0	35-90	30-80	10-60	0-20	85-100	0-15	0-5
Salchaket	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-24	Very fine sandy loam	0	0	100	100	90-100	65-75	45-80	10-50	5-10
	24-45	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-80	10-50	5-10
	45-72	Very gravelly sand	0	0	40-70	30-55	20-30	5-10	85-100	0-15	0-5
140:											
Lemeta	0-20	Peat	—	—	—	—	—	—	—	—	—
	20-72	Permanently frozen mucky peat	—	—	—	—	—	—	—	—	—
141:											
Liscum	0-3	Peat	—	—	—	—	—	—	—	—	—
	3-11	Muck	—	—	—	—	—	—	—	—	—
	11-15	Mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	15-70	Stratified silt loam to loamy fine sand	0	0	100	100	80-100	50-80	45-80	10-50	0-10
	70-72	Very gravelly sandy loam	0	0	35-60	25-50	25-45	10-35	45-75	20-50	0-5
Noonku	0-2	Moderately decomposed plant material	—	—	—	—	—	—	—	—	—
	2-6	Silt loam	0	0	100	100	85-100	50-90	14-47	50-80	3-10
	6-47	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	0-100	0-55	45-80	10-50	0-10
	47-72	Gravelly sand, extremely gravelly sand, very gravelly sand	0	0	35-90	25-75	0-45	0-20	85-100	0-15	0-3

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number— 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
142:											
Minto	0-5	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-50	50-80	0-10
	9-16	Silt loam, silt	0	0	100	100	90-100	85-100	0-50	50-100	0-10
	16-72	Silt loam, silt	0	0	100	100	95-100	85-100	0-50	50-100	0-10
143:											
Minto	0-5	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-50	50-80	0-10
	9-16	Silt loam, silt	0	0	100	100	90-100	85-100	0-50	50-100	0-10
	16-72	Silt loam, silt	0	0	100	100	95-100	85-100	0-50	50-100	0-10
144:											
Minto	0-5	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-50	50-80	0-10
	9-16	Silt loam, silt	0	0	100	100	90-100	85-100	0-50	50-100	0-10
	16-72	Silt loam, silt	0	0	100	100	95-100	85-100	0-50	50-100	0-10
145:											
Minto	0-5	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-50	50-80	0-10
	9-16	Silt loam, silt	0	0	100	100	90-100	85-100	0-50	50-100	0-10
	16-72	Silt loam, silt	0	0	100	100	95-100	85-100	0-50	50-100	0-10
Chatanika	0-4	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-6	Mucky silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
146:											
Minto	0-5	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-50	50-80	0-10
	9-16	Silt loam, silt	0	0	100	100	90-100	85-100	0-50	50-100	0-10
	16-72	Silt loam, silt	0	0	100	100	95-100	85-100	0-50	50-100	0-10
Chatanika	0-4	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-6	Mucky silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
147:											
Minto	0-5	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-50	50-80	0-10
	9-16	Silt loam, silt	0	0	100	100	90-100	85-100	0-50	50-100	0-10
	16-72	Silt loam, silt	0	0	100	100	95-100	85-100	0-50	50-100	0-10
Chatanika	0-4	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-6	Mucky silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
148:											
Minto	0-5	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-50	50-80	0-10
	9-16	Silt loam, silt	0	0	100	100	90-100	85-100	0-50	50-100	0-10
	16-72	Silt loam, silt	0	0	100	100	95-100	85-100	0-50	50-100	0-10
Chatanika	0-4	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-6	Mucky silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	6-21	Silt loam	0	0	100	100	90-100	80-95	10-50	50-80	0-10
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
149:											
Mosquito	0-18	Peat	—	—	—	—	—	—	—	—	—
	18-24	Silt loam, very fine sandy loam, stratified silt loam to loamy fine sand	0	0	100	100	90-100	70-95	45-80	10-50	0-10
	24-72	Permanently frozen material	—	—	—	—	—	—	—	—	—

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number— 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
150:											
Mosquito	0-18	Peat	—	—	—	—	—	—	—	—	—
	18-24	Silt loam, very fine sandy loam, stratified silt loam to loamy fine sand	0	0	100	100	90-100	70-95	45-80	10-50	0-10
	24-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
Noonku	0-2	Moderately decomposed plant material	—	—	—	—	—	—	—	—	—
	2-6	Silt loam	0	0	100	100	85-100	50-90	14-47	50-80	3-10
	6-47	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	0-100	0-55	45-80	10-50	0-10
	47-72	Gravelly sand, extremely gravelly sand, very gravelly sand	0	0	35-90	25-75	0-45	0-20	85-100	0-15	0-3
151:											
Noonku	0-2	Moderately decomposed plant material	—	—	—	—	—	—	—	—	—
	2-6	Silt loam	0	0	100	100	85-100	50-90	14-47	50-80	3-10
	6-47	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	0-100	0-55	45-80	10-50	0-10
	47-72	Gravelly sand, extremely gravelly sand, very gravelly sand	0	0	35-90	25-75	0-45	0-20	85-100	0-15	0-3
152:											
North Pole	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-4	Highly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-39	Stratified fine sand to silt loam	0	0	100	100	80-100	40-80	45-80	10-50	0-10
	39-72	Very gravelly sand, extremely gravelly sand, gravelly coarse sand	0	0	55-85	25-75	0-45	0-20	85-100	0-15	0-3
153:											
North Pole	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-4	Highly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-39	Stratified fine sand to silt loam	0	0	100	100	80-100	40-80	45-80	10-50	0-10
	39-72	Very gravelly sand, extremely gravelly sand, gravelly coarse sand	0	0	55-85	25-75	0-45	0-20	85-100	0-15	0-3
Mosquito	0-18	Peat	—	—	—	—	—	—	—	—	—
	18-24	Silt loam, very fine sandy loam, stratified silt loam to loamy fine sand	0	0	100	100	90-100	70-95	45-80	10-50	0-10
	24-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
Liscum	0-3	Peat	—	—	—	—	—	—	—	—	—
	3-11	Muck	—	—	—	—	—	—	—	—	—
	11-15	Mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	15-70	Stratified silt loam to loamy fine sand	0	0	100	100	80-100	50-80	45-80	10-50	0-10
	70-72	Gravelly sandy loam	0	0	55-70	50-65	30-50	10-50	45-75	20-50	0-5
154:											
North Pole	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-4	Highly decomposed plant material	—	—	—	—	—	—	—	—	—
	4-39	Stratified fine sand to silt loam	0	0	100	100	80-100	40-80	45-80	10-50	0-10
	39-72	Very gravelly sand, extremely gravelly sand, gravelly coarse sand	0	0	55-85	25-75	0-45	0-20	85-100	0-15	0-3
Noonku	0-2	Moderately decomposed plant material	—	—	—	—	—	—	—	—	—
	2-6	Silt loam	0	0	100	100	85-100	50-90	14-47	50-80	3-10
	6-47	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	0-100	0-55	45-80	10-50	0-10
	47-72	Gravelly sand, extremely gravelly sand, very gravelly sand	0	0	35-90	25-75	0-45	0-20	85-100	0-15	0-3
155:											
Peede	0-2	Moderately decomposed plant material	—	—	—	—	—	—	—	—	—
	2-72	Silt loam	0	0	100	100	85-100	70-90	10-47	50-80	3-10
156:											
Peede	0-2	Moderately decomposed plant material	—	—	—	—	—	—	—	—	—
	2-72	Silt loam	0	0	100	100	85-100	70-90	10-47	50-80	3-10
Mosquito	0-18	Peat	—	—	—	—	—	—	—	—	—
	18-24	Silt loam, very fine sandy loam, stratified silt loam to loamy fine sand	0	0	100	100	90-100	70-95	45-80	10-50	0-10
	24-72	Permanently frozen material	—	—	—	—	—	—	—	—	—

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number— 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
157:											
Piledriver	0-3	Slightly decomposed plant material	—-	—-	—-	—-	—-	—-	—-	—-	—-
	3-15	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	70-100	40-95	45-80	10-50	5-10
	15-33	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	40-100	5-55	45-80	10-50	0-10
	33-72	Sand, very gravelly sand	0	0	55-90	25-85	10-60	0-20	85-100	0-15	0-5
158:											
Piledriver	0-3	Slightly decomposed plant material	—-	—-	—-	—-	—-	—-	—-	—-	—-
	3-15	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	70-100	40-95	45-80	10-50	5-10
	15-33	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	40-100	5-55	45-80	10-50	0-10
	33-72	Sand, very gravelly sand	0	0	55-90	25-85	10-60	0-20	85-100	0-15	0-5
Eielson	0-2	Slightly decomposed plant material	—-	—-	—-	—-	—-	—-	—-	—-	—-
	2-49	Very fine sandy loam	0	0	100	100	90-100	65-75	50-77	13-45	5-10
	49-71	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-80	10-50	5-10
	71-72	Extremely gravelly sand, gravelly sand, very gravelly sand	0	15-30	50-80	30-80	20-30	5-10	86-100	0-14	0-5
159:											
Piledriver	0-3	Slightly decomposed plant material	—-	—-	—-	—-	—-	—-	—-	—-	—-
	3-15	Stratified fine sand to silt loam, very fine sandy loam	0	0	100	100	70-100	40-95	45-80	10-50	5-10
	15-33	Stratified sand to fine sand to very fine sandy loam	0	0	100	100	40-100	5-55	45-80	10-50	0-10
	33-72	Sand, very gravelly sand	0	0	55-90	25-85	10-60	0-20	85-100	0-15	0-5
Fubar	0-2	Slightly decomposed plant material	—-	—-	—-	—-	—-	—-	—-	—-	—-
	2-10	Stratified fine sand to silt loam, very fine sandy loam	0	0	95-100	90-100	50-100	25-80	45-75	20-50	5-10
	10-72	Sand, extremely gravelly sand, fine sand, very gravelly coarse sand	0	0	48-90	15-85	15-35	0-10	85-100	0-15	0-5
160:											
Pits, gravel	—-	—-	—-	—-	—-	—-	—-	—-	—-	—-	
161:											
Quarry pits	—-	—-	—-	—-	—-	—-	—-	—-	—-	—-	
162:											
Riverwash	—-	—-	—-	—-	—-	—-	—-	—-	—-	—-	
163:											
Salchaket	0-3	Slightly decomposed plant material	—-	—-	—-	—-	—-	—-	—-	—-	—-
	3-24	Very fine sandy loam	0	0	100	100	90-100	65-75	45-80	10-50	5-10
	24-45	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-80	10-50	5-10
	45-72	Very gravelly sand	0	0	40-70	30-55	20-30	5-10	85-100	0-15	0-5
164:											
Salchaket	0-3	Slightly decomposed plant material	—-	—-	—-	—-	—-	—-	—-	—-	—-
	3-24	Very fine sandy loam	0	0	100	100	90-100	65-75	45-80	10-50	5-10
	24-45	Stratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-80	10-50	5-10
	45-72	Very gravelly sand	0	0	40-70	30-55	20-30	5-10	85-100	0-15	0-5
Typic Cryorthents	0-30	Stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam	0	0	65-80	50-75	30-65	10-55	47-77	16-50	3-7
	30-63	Stratified fine sand to silt loam	0	0	100	95-100	75-95	50-75	45-75	20-50	1-5
	63-72	Very gravelly sand, extremely gravelly sand	0	0	40-65	20-50	10-35	0-10	85-100	0-15	0-3
165:											
Saulich	0-16	Mucky peat, peat	—-	—-	—-	—-	—-	—-	—-	—-	—-
	16-21	Silt loam, mucky silt loam	0	0	100	100	90-100	65-75	15-50	50-80	0-5
	21-72	Permanently frozen material	—-	—-	—-	—-	—-	—-	—-	—-	—-

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number— 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
166:											
Saulich	0-16	Mucky peat, peat	—	—	—	—	—	—	—	—	—
	16-21	Silt loam, mucky silt loam	0	0	100	100	90-100	65-75	15-50	50-80	0-5
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
167:											
Saulich	0-16	Mucky peat, peat	—	—	—	—	—	—	—	—	—
	16-21	Silt loam, mucky silt loam	0	0	100	100	90-100	65-75	15-50	50-80	0-5
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
168:											
Saulich	0-16	Mucky peat, peat	—	—	—	—	—	—	—	—	—
	16-21	Silt loam, mucky silt loam	0	0	100	100	90-100	65-75	15-50	50-80	0-5
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
Minto	0-5	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-50	50-80	0-10
	9-16	Silt loam, silt	0	0	100	100	90-100	85-100	0-50	50-100	0-10
	16-72	Silt loam, silt	0	0	100	100	95-100	85-100	0-50	50-100	0-10
169:											
Saulich	0-16	Mucky peat, peat	—	—	—	—	—	—	—	—	—
	16-21	Silt loam, mucky silt loam	0	0	100	100	90-100	65-75	15-50	50-80	0-5
	21-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
Minto	0-5	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	5-9	Silt loam	0	0	100	100	90-100	85-100	10-50	50-80	0-10
	9-16	Silt loam, silt	0	0	100	100	90-100	85-100	0-50	50-100	0-10
	16-72	Silt loam, silt	0	0	100	100	95-100	85-100	0-50	50-100	0-10
170:											
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
171:											
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
172:											
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
173:											
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
174:											
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number— 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
175:											
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
176:											
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
Gilmore	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	6-12	Silt loam, silt	0	0	100	100	85-95	75-85	0-50	50-100	0-5
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	0-5
	19-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
177:											
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
Gilmore	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	6-12	Silt loam, silt	0	0	100	100	85-95	75-85	0-50	50-100	0-5
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	0-5
	19-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
178:											
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
Gilmore	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	6-12	Silt loam, silt	0	0	100	100	85-95	75-85	0-50	50-100	0-5
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	0-5
	19-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
179:											
Steese	0-2	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	2-5	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	5-27	Silt, silt loam	0	0	100	100	90-100	80-90	0-50	50-100	0-5
	27-33	Very channery silt loam, channery silt loam, extremely channery silt loam	0	0-40	40-65	15-55	15-55	10-50	15-50	50-80	0-5
	33-72	Weathered bedrock	—	—	—	—	—	—	—	—	—
Gilmore	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam	0	0	100	100	90-100	80-90	15-50	50-80	0-5
	6-12	Silt loam, silt	0	0	100	100	85-95	75-85	0-50	50-100	0-5
	12-19	Very channery silt loam, extremely channery silt loam	0	30-50	35-65	15-55	15-55	10-50	15-50	50-80	0-5
	19-72	Weathered bedrock	—	—	—	—	—	—	—	—	—

Table 6. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number— 4	10	40	200	Sand	Silt	Clay
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
180:											
Tanacross	0-9	Peat	—	—	—	—	—	—	—	—	—
	9-11	Mucky silt loam	0	0	100	100	95-100	75-90	10-50	50-80	0-10
	11-17	Stratified fine sandy loam to silt loam	0	0	100	100	85-100	60-95	45-80	10-50	0-10
	17-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
181:											
Tanana	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	6-25	Very fine sandy loam, stratified silt loam to loamy fine sand	0	0	100	100	85-100	65-90	45-80	10-50	5-10
	25-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
182:											
Tanana	0-3	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	3-6	Silt loam, mucky silt loam	0	0	100	100	95-100	75-90	10-45	50-80	5-10
	6-25	Very fine sandy loam, stratified silt loam to loamy fine sand	0	0	100	100	85-100	65-90	45-80	10-50	5-10
	25-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
Mosquito	0-18	Peat	—	—	—	—	—	—	—	—	—
	18-24	Silt loam, very fine sandy loam, stratified silt loam to loamy fine sand	0	0	100	100	90-100	70-95	45-80	10-50	0-10
	24-72	Permanently frozen material	—	—	—	—	—	—	—	—	—
183:											
Typic Cryaquents	0-6	Moderately decomposed plant material	—	—	—	—	—	—	—	—	—
	6-72	Silt loam	0	0	100	100	85-100	75-95	10-45	50-80	5-10
Histic Cryaquepts	0-13	Mucky peat, muck	—	—	—	—	—	—	—	—	—
	13-30	Very fine sandy loam, silt loam	0	0	100	100	50-100	30-100	10-80	10-80	0-10
	30-72	Very fine sandy loam, silt loam	0	0	100	100	50-100	25-100	10-80	10-80	0-10
Terric Cryofibrists	0-28	Peat	—	—	—	—	—	—	—	—	—
	28-40	Muck	—	—	—	—	—	—	—	—	—
	40-72	Silt loam, very fine sandy loam, silty clay loam	0	0	100	100	95-100	80-100	0-75	20-90	5-35
184:											
Typic Cryorthents	0-1	Slightly decomposed plant material	—	—	—	—	—	—	—	—	—
	1-49	Stratified fine sand to silt loam	0	0	100	95-100	85-95	40-65	45-75	20-50	1-5
	49-72	Very gravelly sand, extremely gravelly sand	0	0	40-65	20-50	10-35	0-10	85-100	0-15	0-3
185:											
Typic Cryorthents, Fill	0-30	Stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam	0	0	65-80	50-75	30-65	10-55	47-77	16-50	3-7
	30-63	Stratified fine sand to silt loam	0	0	100	95-100	75-95	50-75	45-75	20-50	1-5
	63-72	Very gravelly sand, extremely gravelly sand	0	0	40-65	20-50	10-35	0-10	85-100	0-15	0-3
Urban land	—	—	—	—	—	—	—	—	—	—	
186:											
Urban land	—	—	—	—	—	—	—	—	—	—	
187:											
Water	—	—	—	—	—	—	—	—	—	—	

Table 7. Physical Properties of the Soils

(See text for definitions of terms used in this table. Entries under "Erosion factors—T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer.Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Moist bulk	Permeability	Available water	Linear extensi-	Organic matter	Erosion factors			Wind erodibility	Wind erodibility
	0-12	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	12-16	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---			
	16-72	---	0.000-0.001	---	---	---	---	---			
102:											
Bradway	0-7	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	7-10	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	8.0-12	.37	.37			
	10-26	1.10-1.20	2-6	0.15-0.18	0.0-2.9	0.0-3.0	.32	.32			
	26-72	---	0.000-0.001	---	---	---	---	---			
103:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
104:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
105:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
106:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
107:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
Goldstream	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-12	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-8.0	.37	.37			
	12-20	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-5.0	.55	.55			
	20-72	---	0.000-0.001	---	---	---	---	---			
108:											
Chena	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	4-9	1.10-1.20	0.6-6	0.16-0.18	0.0-2.9	3.0-6.0	.28	.32			
	9-72	1.40-1.50	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.10	.55			
109:											
Dumps, landfill	---	---	---	---	---	---	---	---	-	---	---
110:											
Dumps, mine	---	---	---	---	---	---	---	---	-	---	---
111:											
Eielson	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			

Table 7. Physical Properties of the Soils

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
112:											
Eielson	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
Piledriver	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-15	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	15-33	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	33-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
113:											
Eielson	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
Tanana	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-6	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	2.0-6.0	.37	.37			
	6-25	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-2.0	.43	.43			
	25-72	---	0.000-0.001	---	---	---	---	---			
114:											
Ester	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-12	1.10-1.20	0.000-0.001	---	---	7.0-12	---	---			
	12-21	1.40-1.50	0.000-0.001	---	---	1.0-5.0	---	---			
	21-72	---	0.000-0.001	---	---	---	---	---			
115:											
Ester	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-12	1.10-1.20	0.000-0.001	---	---	7.0-12	---	---			
	12-21	1.40-1.50	0.000-0.001	---	---	1.0-5.0	---	---			
	21-72	---	0.000-0.001	---	---	---	---	---			
116:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
117:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
118:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
119:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
120:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
121:											
Fairbanks, strongly sloping	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
Fairbanks, steep	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			

Table 7. Physical Properties of the Soils

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
122:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			
123:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			
124:											
Fubar	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-10	1.20-1.30	0.6-2	0.20-0.22	0.0-2.9	2.0-4.0	.32	.32			
	10-72	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.05	.28			
Piledriver	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-15	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	15-33	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	33-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
125:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
126:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
127:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
128:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
129:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			

Table 7. Physical Properties of the Soils

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
130:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
131:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.15	.55			
	19-72	---	2-6	---	---	---	---	---			
Ester	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-12	1.10-1.20	0.000-0.001	---	---	7.0-12	---	---			
	12-21	1.40-1.50	0.000-0.001	---	---	1.0-5.0	---	---			
	21-72	---	0.000-0.001	---	---	---	---	---			
132:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			
133:											
Goldstream	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-12	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-8.0	.37	.37			
	12-20	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-5.0	.55	.55			
	20-72	---	0.000-0.001	---	---	---	---	---			
134:											
Goldstream	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-12	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-8.0	.37	.37			
	12-20	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-5.0	.55	.55			
	20-72	---	0.000-0.001	---	---	---	---	---			
135:											
Goldstream	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-12	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-8.0	.37	.37			
	12-20	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-5.0	.55	.55			
	20-72	---	0.000-0.001	---	---	---	---	---			
Histels	0-12	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	12-17	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---			
	17-26	---	0.000-0.001	---	---	---	---	---			
	26-72	---	0.000-0.001	---	---	---	---	---			
136:											
Histels	0-12	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	12-17	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---			
	17-26	---	0.000-0.001	---	---	---	---	---			
	26-72	---	0.000-0.001	---	---	---	---	---			
137:											
Jarvis	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-6	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	6-24	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	24-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			

Table 7. Physical Properties of the Soils

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
138:											
Jarvis	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-6	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	6-24	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	24-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
Chena	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	4-9	1.10-1.20	0.6-6	0.16-0.18	0.0-2.9	3.0-6.0	.28	.32			
	9-72	1.40-1.50	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.10	.55			
139:											
Jarvis	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-6	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	6-24	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	24-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
Salchaket	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-24	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	24-45	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	45-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
140:											
Lemeta	0-20	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	20-72	---	0.000-0.001	---	---	---	---	---			
141:											
Liscum	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	3-11	0.20-0.30	0.001-0.06	0.25-0.30	---	60-85	---	---			
	11-15	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-8.0	.37	.37			
	15-70	1.20-1.60	0.6-2	0.15-0.22	0.0-2.9	1.0-5.0	.43	.43			
	70-72	1.30-1.50	2-6	0.10-0.14	0.0-2.9	1.0-3.0	.20	.37			
Noonku	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	1.10-1.20	0.6-2	0.20-0.25	0.0-2.9	2.0-6.0	.37	.37			
	6-47	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	47-72	1.40-1.70	6-20	0.03-0.04	0.0-2.9	0.0-1.0	.05	.28			
142:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
143:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
144:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
145:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			

Table 7. Physical Properties of the Soils

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
146:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
147:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
148:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
149:											
Mosquito	0-18	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	18-24	0.80-1.40	0.6-2	0.24-0.28	0.0-2.9	5.0-20	.37	.37			
	24-72	---	0.000-0.001	---	---	---	---	---			
150:											
Mosquito	0-18	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	18-24	0.80-1.40	0.6-2	0.24-0.28	0.0-2.9	5.0-20	.37	.37			
	24-72	---	0.000-0.001	---	---	---	---	---			
Noonku	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	1.10-1.20	0.6-2	0.20-0.25	0.0-2.9	2.0-6.0	.37	.37			
	6-47	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	47-72	1.40-1.70	6-20	0.03-0.04	0.0-2.9	0.0-1.0	.05	.28			
151:											
Noonku	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	1.10-1.20	0.6-2	0.20-0.25	0.0-2.9	2.0-6.0	.37	.37			
	6-47	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	47-72	1.40-1.70	6-20	0.03-0.04	0.0-2.9	0.0-1.0	.05	.28			
152:											
North Pole	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-4	0.20-0.30	0.001-0.06	0.25-0.30	---	60-85	---	---			
	4-39	1.20-1.60	0.6-2	0.15-0.22	0.0-2.9	1.0-5.0	.43	.43			
	39-72	1.40-1.70	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.05	.28			

Table 7. Physical Properties of the Soils

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
153:											
North Pole	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-4	0.20-0.30	0.001-0.06	0.25-0.30	---	60-85	---	---			
	4-39	1.20-1.60	0.6-2	0.15-0.22	0.0-2.9	1.0-5.0	.43	.43			
	39-72	1.40-1.70	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.05	.28			
Mosquito	0-18	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	18-24	0.80-1.40	0.6-2	0.24-0.28	0.0-2.9	5.0-20	.37	.37			
	24-72	---	0.000-0.001	---	---	---	---	---			
Liscum	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	3-11	0.20-0.30	0.001-0.06	0.25-0.30	---	60-85	---	---			
	11-15	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-8.0	.37	.37			
	15-70	1.20-1.60	0.6-2	0.15-0.22	0.0-2.9	1.0-5.0	.43	.43			
	70-72	1.30-1.50	2-6	0.10-0.14	0.0-2.9	1.0-3.0	.20	.37			
154:											
North Pole	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-4	0.20-0.30	0.001-0.06	0.25-0.30	---	60-85	---	---			
	4-39	1.20-1.60	0.6-2	0.15-0.22	0.0-2.9	1.0-5.0	.43	.43			
	39-72	1.40-1.70	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.05	.28			
Noonku	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	1.10-1.20	0.6-2	0.20-0.25	0.0-2.9	2.0-6.0	.37	.37			
	6-47	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	47-72	1.40-1.70	6-20	0.03-0.04	0.0-2.9	0.0-1.0	.05	.28			
155:											
Peede	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-72	1.10-1.20	0.6-2	0.20-0.25	0.0-2.9	1.0-5.0	.37	.37			
156:											
Peede	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-72	1.10-1.20	0.6-2	0.20-0.25	0.0-2.9	1.0-5.0	.37	.37			
Mosquito	0-18	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	18-24	0.80-1.40	0.6-2	0.24-0.28	0.0-2.9	5.0-20	.37	.37			
	24-72	---	0.000-0.001	---	---	---	---	---			
157:											
Piledriver	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-15	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	15-33	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	33-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
158:											
Piledriver	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-15	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	15-33	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	33-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
Eielson	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
159:											
Piledriver	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-15	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	15-33	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	33-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
Fubar	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-10	1.20-1.30	0.6-2	0.20-0.22	0.0-2.9	2.0-4.0	.32	.32			
	10-72	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.05	.28			
160:											
Pits, gravel	---	---	---	---	---	---	---	---	-	---	---

Table 7. Physical Properties of the Soils

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
161:											
Pits, quarry	---	---	---	---	---	---	---	---	-	---	---
162:											
Riverwash	---	---	---	---	---	---	---	---	-	---	---
163:											
Salchaket	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-24	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	24-45	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	45-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
164:											
Salchaket	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-24	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	24-45	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	45-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
Typic Cryorthents	0-30	1.30-1.60	0.6-2	0.12-0.15	0.0-2.9	3.0-10	.24	.37	2	2	134
	30-63	1.10-1.30	6-20	0.06-0.22	0.0-2.9	0.0-1.0	.05	.28			
	63-72	1.30-1.50	6-20	0.05-0.06	0.0-2.9	0.0-1.0	.05	.28			
165:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-10	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
166:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-10	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
167:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-10	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
168:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-10	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
169:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-10	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
170:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			
171:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			

Table 7. Physical Properties of the Soils

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
172:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			
173:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			
174:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			
175:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			
176:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
177:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
178:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			

Table 7. Physical Properties of the Soils

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
179:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-3.0	.15	.55			
	33-72	---	---	---	---	---	---	---			
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	1.0-5.0	.10	.43			
	19-72	---	2-6	---	---	---	---	---			
180:											
Tanacross	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-11	0.80-1.20	0.6-2	0.20-0.22	0.0-2.9	5.0-10	.37	.37			
	11-17	1.20-1.40	0.6-6	0.17-0.22	0.0-2.9	0.0-1.0	.43	.43			
	17-72	---	0.000-0.001	---	---	---	---	---			
181:											
Tanana	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-6	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	2.0-6.0	.37	.37			
	6-25	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-2.0	.43	.43			
	25-72	---	0.000-0.001	---	---	---	---	---			
182:											
Tanana	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-6	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	2.0-6.0	.37	.37			
	6-25	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-2.0	.43	.43			
	25-72	---	0.000-0.001	---	---	---	---	---			
Mosquito	0-18	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	18-24	0.80-1.40	0.6-2	0.24-0.28	0.0-2.9	5.0-20	.37	.37			
	24-72	---	0.000-0.001	---	---	---	---	---			
183:											
Typic Cryaquents	0-6	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	5	8	0
	6-72	1.10-1.30	0.2-2	0.20-0.22	0.0-2.9	1.0-5.0	.37	.37			
Histic Cryaquepts	0-13	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	13-30	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	3.0-7.0	.37	.37			
	30-72	1.20-1.40	0.6-2	0.18-0.23	0.0-2.9	1.0-5.0	.43	.43			
Terric Cryofibrists	0-28	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	28-40	0.20-0.30	0.001-0.06	0.40-0.55	---	60-85	---	---			
	40-72	1.30-1.45	0.2-0.6	0.20-0.27	0.0-2.9	5.0-10	.37	.37			
184:											
Typic Cryorthents	0-1	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	1-49	1.10-1.30	0.6-2	0.20-0.22	0.0-2.9	1.0-3.0	.32	.32			
	49-72	1.30-1.50	6-20	0.05-0.06	0.0-2.9	0.0-1.0	.05	.28			
185:											
Typic Cryorthents, fill	0-30	1.30-1.60	0.6-2	0.12-0.15	0.0-2.9	3.0-10	.24	.37	2	2	134
	30-63	1.10-1.30	6-20	0.06-0.22	0.0-2.9	0.0-1.0	.05	.28			
	63-72	1.30-1.50	6-20	0.05-0.06	0.0-2.9	0.0-1.0	.05	.28			
Urban land	---	---	---	---	---	---	---	---	-	---	---
186:											
Urban land	---	---	---	---	---	---	---	---	-	---	---
187:											
Water	---	---	---	---	---	---	---	---	-	---	---

Table 8. Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
101:				
Bolio	0-12	—	115-155	3.6-5.5
	12-16	—	120-210	3.6-6.0
	16-72	—	—	3.6-6.0
102:				
Bradway	0-7	115-155	—	5.6-6.5
	7-10	15-30	—	5.6-6.5
	10-26	1-10	—	7.4-7.8
	26-72	—	—	—
103:				
Chatanika	0-4	—	115-155	4.5-6.1
	4-6	—	15-30	4.5-5.5
	6-21	5-15	—	4.5-6.1
	21-72	—	—	5.6-6.5
104:				
Chatanika	0-4	—	115-155	4.5-6.1
	4-6	—	15-30	4.5-5.5
	6-21	5-15	—	4.5-6.1
	21-72	—	—	5.6-6.5
105:				
Chatanika	0-4	—	115-155	4.5-6.1
	4-6	—	15-30	4.5-5.5
	6-21	5-15	—	4.5-6.1
	21-72	—	—	5.6-6.5
106:				
Chatanika	0-4	—	115-155	4.5-6.1
	4-6	—	15-30	4.5-5.5
	6-21	5-15	—	4.5-6.1
	21-72	—	—	5.6-6.5
107:				
Chatanika	0-4	—	115-155	4.5-6.1
	4-6	—	15-30	4.5-5.5
	6-21	5-15	—	4.5-6.1
	21-72	—	—	5.6-6.5
Goldstream	0-9	—	70-120	3.6-4.5
	9-12	—	15-30	4.5-5.5
	12-20	—	5-15	4.5-5.5
	20-72	—	—	4.5-5.5
108:				
Chena	0-4	115-155	—	5.1-6.0
	4-9	5-20	—	5.6-6.5
	9-72	1-5	—	5.6-6.5
109:				
Dumps, landfill	—	—	—	—
110:				
Dumps, mine	—	—	—	—
111:				
Eielson	0-2	115-155	—	5.1-7.1
	2-49	15-30	—	5.6-7.1
	49-71	1-5	—	6.1-7.6
	71-72	1-5	—	6.1-7.6
112:				
Eielson	0-2	115-155	—	5.1-7.1
	2-49	15-30	—	5.6-7.1
	49-71	1-5	—	6.1-7.6
	71-72	1-5	—	6.1-7.6

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
112:				
Piledriver	0-3	115-155	—-	5.6-6.6
	3-15	15-30	—-	5.1-6.5
	15-33	5-15	—-	5.6-7.3
	33-72	1-5	—-	5.6-7.3
113:				
Eielson	0-2	115-155	—-	5.1-7.1
	2-49	15-30	—-	5.6-7.1
	49-71	1-5	—-	6.1-7.6
	71-72	1-5	—-	6.1-7.6
Tanana	0-3	115-155	—-	4.5-5.0
	3-6	15-30	—-	5.1-6.0
	6-25	5-20	—-	5.6-7.3
	25-72	—-	—-	6.6-7.3
114:				
Ester	0-9	—-	115-155	3.6-4.5
	9-12	—-	15-30	4.5-5.5
	12-21	—-	10-25	4.6-5.8
	21-72	—-	—-	—-
115:				
Ester	0-9	—-	115-155	3.6-4.5
	9-12	—-	15-30	4.5-5.5
	12-21	—-	10-25	4.6-5.8
	21-72	—-	—-	—-
116:				
Fairbanks	0-3	115-155	—-	5.6-6.0
	3-30	15-30	—-	5.6-6.0
	30-72	5-15	—-	6.1-7.3
117:				
Fairbanks	0-3	115-155	—-	5.6-6.0
	3-30	15-30	—-	5.6-6.0
	30-72	5-15	—-	6.1-7.3
118:				
Fairbanks	0-3	115-155	—-	5.6-6.0
	3-30	15-30	—-	5.6-6.0
	30-72	5-15	—-	6.1-7.3
119:				
Fairbanks	0-3	115-155	—-	5.6-6.0
	3-30	15-30	—-	5.6-6.0
	30-72	5-15	—-	6.1-7.3
120:				
Fairbanks	0-3	115-155	—-	5.6-6.0
	3-30	15-30	—-	5.6-6.0
	30-72	5-15	—-	6.1-7.3
121:				
Fairbanks, strongly sloping	0-3	115-155	—-	5.6-6.0
	3-30	15-30	—-	5.6-6.0
	30-72	5-15	—-	6.1-7.3
Fairbanks, steep	0-3	115-155	—-	5.6-6.0
	3-30	15-30	—-	5.6-6.0
	30-72	5-15	—-	6.1-7.3

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
122:				
Fairbanks	0-3	115-155	—-	5.6-6.0
	3-30	15-30	—-	5.6-6.0
	30-72	5-15	—-	6.1-7.3
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-
123:				
Fairbanks	0-3	115-155	—-	5.6-6.0
	3-30	15-30	—-	5.6-6.0
	30-72	5-15	—-	6.1-7.3
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-
124:				
Fubar	0-2	115-155	—-	5.1-6.1
	2-10	5-10	—-	5.6-6.5
	10-72	1-5	—-	5.6-7.3
Piledriver	0-3	115-155	—-	5.6-6.6
	3-15	15-30	—-	5.1-6.5
	15-33	5-15	—-	5.6-7.3
	33-72	1-5	—-	5.6-7.3
125:				
Gilmore	0-3	115-155	—-	5.1-6.0
	3-6	15-30	—-	5.6-6.0
	6-12	1-5	—-	5.6-6.0
	12-19	1-5	—-	6.1-6.5
	19-72	—-	—-	—-
126:				
Gilmore	0-3	115-155	—-	5.1-6.0
	3-6	15-30	—-	5.6-6.0
	6-12	1-5	—-	5.6-6.0
	12-19	1-5	—-	6.1-6.5
	19-72	—-	—-	—-
127:				
Gilmore	0-3	115-155	—-	5.1-6.0
	3-6	15-30	—-	5.6-6.0
	6-12	1-5	—-	5.6-6.0
	12-19	1-5	—-	6.1-6.5
	19-72	—-	—-	—-
128:				
Gilmore	0-3	115-155	—-	5.1-6.0
	3-6	15-30	—-	5.6-6.0
	6-12	1-5	—-	5.6-6.0
	12-19	1-5	—-	6.1-6.5
	19-72	—-	—-	—-
129:				
Gilmore	0-3	115-155	—-	5.1-6.0
	3-6	15-30	—-	5.6-6.0
	6-12	1-5	—-	5.6-6.0
	12-19	1-5	—-	6.1-6.5
	19-72	—-	—-	—-

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
130:				
Gilmore	0-3	115-155	—-	5.1-6.0
	3-6	15-30	—-	5.6-6.0
	6-12	1-5	—-	5.6-6.0
	12-19	1-5	—-	6.1-6.5
	19-72	—-	—-	—-
131:				
Gilmore	0-3	115-155	—-	5.1-6.0
	3-6	15-30	—-	5.6-6.0
	6-12	1-5	—-	5.6-6.0
	12-19	1-5	—-	6.1-6.5
	19-72	—-	—-	—-
131:				
Ester	0-9	—-	115-155	3.6-4.5
	9-12	—-	15-30	4.5-5.5
	12-21	—-	10-25	4.6-5.8
	21-72	—-	—-	—-
132:				
Gilmore	0-3	115-155	—-	5.1-6.0
	3-6	15-30	—-	5.6-6.0
	6-12	1-5	—-	5.6-6.0
	12-19	1-5	—-	6.1-6.5
	19-72	—-	—-	—-
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-
133:				
Goldstream	0-9	—-	70-120	3.6-4.5
	9-12	—-	15-30	4.5-5.5
	12-20	—-	5-15	4.5-5.5
	20-72	—-	—-	4.5-5.5
134:				
Goldstream	0-9	—-	70-120	3.6-4.5
	9-12	—-	15-30	4.5-5.5
	12-20	—-	5-15	4.5-5.5
	20-72	—-	—-	4.5-5.5
135:				
Goldstream	0-9	—-	70-120	3.6-4.5
	9-12	—-	15-30	4.5-5.5
	12-20	—-	5-15	4.5-5.5
	20-72	—-	—-	4.5-5.5
Histels	0-12	—-	115-155	3.6-4.5
	12-17	—-	120-210	3.6-5.0
	17-26	—-	—-	3.6-5.0
	26-72	—-	—-	5.1-6.0
136:				
Histels	0-12	—-	115-155	3.6-4.5
	12-17	—-	120-210	3.6-5.0
	17-26	—-	—-	3.6-5.0
	26-72	—-	—-	5.1-6.0
137:				
Jarvis	0-3	115-155	—-	5.6-6.6
	3-6	15-30	—-	5.1-6.5
	6-24	1-5	—-	5.6-7.3
	24-72	1-5	—-	5.6-7.3

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
138:				
Jarvis	0-3	115-155	—-	5.6-6.6
	3-6	15-30	—-	5.1-6.5
	6-24	1-5	—-	5.6-7.3
	24-72	1-5	—-	5.6-7.3
Chena	0-4	115-155	—-	5.1-6.0
	4-9	5-20	—-	5.6-6.5
	9-72	1-5	—-	5.6-6.5
139:				
Jarvis	0-3	115-155	—-	5.6-6.6
	3-6	15-30	—-	5.1-6.5
	6-24	1-5	—-	5.6-7.3
	24-72	1-5	—-	5.6-7.3
Salchaket	0-3	—-	115-155	4.5-5.6
	3-24	15-30	—-	5.1-6.0
	24-45	5-15	—-	5.6-7.3
	45-72	1-5	—-	6.1-7.3
140:				
Lemeta	0-20	—-	115-155	4.5-5.0
	20-72	—-	—-	5.1-6.1
141:				
Liscum	0-3	115-155	—-	6.1-7.3
	3-11	120-240	—-	6.1-7.3
	11-15	—-	15-30	4.5-5.5
	15-70	5-25	—-	6.1-7.3
	70-72	5-10	—-	6.1-7.3
Noonku	0-2	120-210	—-	6.1-7.3
	2-6	5-30	—-	6.1-7.3
	6-47	5-10	—-	6.1-7.5
	47-72	1-5	—-	6.1-7.5
142:				
Minto	0-5	—-	115-155	4.5-5.0
	5-9	—-	15-30	5.6-6.5
	9-16	—-	5-15	5.6-6.0
	16-72	5-15	—-	6.1-6.5
143:				
Minto	0-5	—-	115-155	4.5-5.0
	5-9	—-	15-30	5.6-6.5
	9-16	—-	5-15	5.6-6.0
	16-72	5-15	—-	6.1-6.5
144:				
Minto	0-5	—-	115-155	4.5-5.0
	5-9	—-	15-30	5.6-6.5
	9-16	—-	5-15	5.6-6.0
	16-72	5-15	—-	6.1-6.5
145:				
Minto	0-5	—-	115-155	4.5-5.0
	5-9	—-	15-30	5.6-6.5
	9-16	—-	5-15	5.6-6.0
	16-72	5-15	—-	6.1-6.5
Chatanika	0-4	—-	115-155	4.5-6.1
	4-6	—-	15-30	4.5-5.5
	6-21	5-15	—-	4.5-6.1
	21-72	—-	—-	5.6-6.5

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
146:				
Minto	0-5	—-	115-155	4.5-5.0
	5-9	—-	15-30	5.6-6.5
	9-16	—-	5-15	5.6-6.0
	16-72	5-15	—-	6.1-6.5
Chatanika	0-4	—-	115-155	4.5-6.1
	4-6	—-	15-30	4.5-5.5
	6-21	5-15	—-	4.5-6.1
	21-72	—-	—-	5.6-6.5
147:				
Minto	0-5	—-	115-155	4.5-5.0
	5-9	—-	15-30	5.6-6.5
	9-16	—-	5-15	5.6-6.0
	16-72	5-15	—-	6.1-6.5
Chatanika	0-4	—-	115-155	4.5-6.1
	4-6	—-	15-30	4.5-5.5
	6-21	5-15	—-	4.5-6.1
	21-72	—-	—-	5.6-6.5
148:				
Minto	0-5	—-	115-155	4.5-5.0
	5-9	—-	15-30	5.6-6.5
	9-16	—-	5-15	5.6-6.0
	16-72	5-15	—-	6.1-6.5
Chatanika	0-4	—-	115-155	4.5-6.1
	4-6	—-	15-30	4.5-5.5
	6-21	5-15	—-	4.5-6.1
	21-72	—-	—-	5.6-6.5
149:				
Mosquito	0-18	115-155	—-	5.1-6.1
	18-24	30-50	—-	5.6-6.6
	24-72	—-	—-	5.6-6.6
150:				
Mosquito	0-18	115-155	—-	5.1-6.1
	18-24	30-50	—-	5.6-6.6
	24-72	—-	—-	5.6-6.6
Noonku	0-2	120-210	—-	6.1-7.3
	2-6	5-30	—-	6.1-7.3
	6-47	5-10	—-	6.1-7.5
	47-72	1-5	—-	6.1-7.5
151:				
Noonku	0-2	120-210	—-	6.1-7.3
	2-6	5-30	—-	6.1-7.3
	6-47	5-10	—-	6.1-7.5
	47-72	1-5	—-	6.1-7.5
152:				
North Pole	0-2	115-155	—-	6.1-7.3
	2-4	120-240	—-	6.1-7.3
	4-39	5-25	—-	6.1-7.3
	39-72	1-5	—-	6.1-7.3

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
153:				
North Pole	0-2	115-155	—-	6.1-7.3
	2-4	120-240	—-	6.1-7.3
	4-39	5-25	—-	6.1-7.3
	39-72	1-5	—-	6.1-7.3
Mosquito	0-18	115-155	—-	5.1-6.1
	18-24	30-50	—-	5.6-6.6
	24-72	—-	—-	5.6-6.6
Liscum	0-3	115-155	—-	6.1-7.3
	3-11	120-240	—-	6.1-7.3
	11-15	—-	15-30	4.5-5.5
	15-70	5-25	—-	6.1-7.3
	70-72	5-10	—-	6.1-7.3
154:				
North Pole	0-2	115-155	—-	6.1-7.3
	2-4	120-240	—-	6.1-7.3
	4-39	5-25	—-	6.1-7.3
	39-72	1-5	—-	6.1-7.3
Noonku	0-2	120-210	—-	6.1-7.3
	2-6	5-30	—-	6.1-7.3
	6-47	5-10	—-	6.1-7.5
	47-72	1-5	—-	6.1-7.5
155:				
Peede	0-2	120-210	—-	6.1-7.3
	2-72	5-9	—-	6.1-7.3
156:				
Peede	0-2	120-210	—-	6.1-7.3
	2-72	5-9	—-	6.1-7.3
Mosquito	0-18	115-155	—-	5.1-6.1
	18-24	30-50	—-	5.6-6.6
	24-72	—-	—-	5.6-6.6
157:				
Piledriver	0-3	115-155	—-	5.6-6.6
	3-15	15-30	—-	5.1-6.5
	15-33	5-15	—-	5.6-7.3
	33-72	1-5	—-	5.6-7.3
158:				
Piledriver	0-3	115-155	—-	5.6-6.6
	3-15	15-30	—-	5.1-6.5
	15-33	5-15	—-	5.6-7.3
	33-72	1-5	—-	5.6-7.3
Eielson	0-2	115-155	—-	5.1-7.1
	2-49	15-30	—-	5.6-7.1
	49-71	1-5	—-	6.1-7.6
	71-72	1-5	—-	6.1-7.6
159:				
Piledriver	0-3	115-155	—-	5.6-6.6
	3-15	15-30	—-	5.1-6.5
	15-33	5-15	—-	5.6-7.3
	33-72	1-5	—-	5.6-7.3
Fubar	0-2	115-155	—-	5.1-6.1
	2-10	5-10	—-	5.6-6.5
	10-72	1-5	—-	5.6-7.3
160:				
Pits, gravel	—-	—-	—-	—-

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
161:				
Quarry pits	—-	—-	—-	—-
162:				
Riverwash	—-	—-	—-	—-
163:				
Salchaket	0-3	—-	115-155	4.5-5.6
	3-24	15-30	—-	5.1-6.0
	24-45	5-15	—-	5.6-7.3
	45-72	1-5	—-	6.1-7.3
164:				
Salchaket	0-3	—-	115-155	4.5-5.6
	3-24	15-30	—-	5.1-6.0
	24-45	5-15	—-	5.6-7.3
	45-72	1-5	—-	6.1-7.3
Typic Cryorthents	0-30	5-15	—-	6.1-7.3
	30-63	5-15	—-	6.1-7.8
	63-72	5-10	—-	6.1-7.8
165:				
Saulich	0-16	—-	115-155	4.5-5.5
	16-21	15-30	—-	5.1-6.6
	21-72	—-	—-	6.1-7.3
166:				
Saulich	0-16	—-	115-155	4.5-5.5
	16-21	15-30	—-	5.1-6.6
	21-72	—-	—-	6.1-7.3
167:				
Saulich	0-16	—-	115-155	4.5-5.5
	16-21	15-30	—-	5.1-6.6
	21-72	—-	—-	6.1-7.3
168:				
Saulich	0-16	—-	115-155	4.5-5.5
	16-21	15-30	—-	5.1-6.6
	21-72	—-	—-	6.1-7.3
Minto	0-5	—-	115-155	4.5-5.0
	5-9	—-	15-30	5.6-6.5
	9-16	—-	5-15	5.6-6.0
	16-72	5-15	—-	6.1-6.5
169:				
Saulich	0-16	—-	115-155	4.5-5.5
	16-21	15-30	—-	5.1-6.6
	21-72	—-	—-	6.1-7.3
Minto	0-5	—-	115-155	4.5-5.0
	5-9	—-	15-30	5.6-6.5
	9-16	—-	5-15	5.6-6.0
	16-72	5-15	—-	6.1-6.5
170:				
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-
171:				
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
172:				
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-
173:				
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-
174:				
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-
175:				
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-
176:				
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-
Gilmore	0-3	115-155	—-	5.1-6.0
	3-6	15-30	—-	5.6-6.0
	6-12	1-5	—-	5.6-6.0
	12-19	1-5	—-	6.1-6.5
	19-72	—-	—-	—-
177:				
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-
Gilmore	0-3	115-155	—-	5.1-6.0
	3-6	15-30	—-	5.6-6.0
	6-12	1-5	—-	5.6-6.0
	12-19	1-5	—-	6.1-6.5
	19-72	—-	—-	—-
178:				
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-
Gilmore	0-3	115-155	—-	5.1-6.0
	3-6	15-30	—-	5.6-6.0
	6-12	1-5	—-	5.6-6.0
	12-19	1-5	—-	6.1-6.5
	19-72	—-	—-	—-

Table 8. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
179:				
Steese	0-2	115-155	—-	5.1-6.5
	2-5	15-30	—-	5.1-6.0
	5-27	5-15	—-	5.1-6.0
	27-33	5-10	—-	6.1-6.5
	33-72	—-	—-	—-
Gilmore	0-3	115-155	—-	5.1-6.0
	3-6	15-30	—-	5.6-6.0
	6-12	1-5	—-	5.6-6.0
	12-19	1-5	—-	6.1-6.5
	19-72	—-	—-	—-
180:				
Tanacross	0-9	—-	30-80	3.5-5.0
	9-11	20-40	—-	5.1-6.0
	11-17	5-20	—-	5.1-6.0
	17-72	—-	—-	5.1-6.0
181:				
Tanana	0-3	115-155	—-	4.5-5.0
	3-6	15-30	—-	5.1-6.0
	6-25	5-20	—-	5.6-7.3
	25-72	—-	—-	6.6-7.3
182:				
Tanana	0-3	115-155	—-	4.5-5.0
	3-6	15-30	—-	5.1-6.0
	6-25	5-20	—-	5.6-7.3
	25-72	—-	—-	6.6-7.3
Mosquito	0-18	115-155	—-	5.1-6.1
	18-24	30-50	—-	5.6-6.6
	24-72	—-	—-	5.6-6.6
183:				
Typic Cryaquents	0-6	120-210	—-	5.6-7.3
	6-72	15-30	—-	6.1-7.3
Histic Cryaquepts	0-13	—-	115-155	4.5-5.6
	13-30	5-15	—-	5.1-6.0
	30-72	5-15	—-	5.5-6.1
Terric Cryofibrists	0-28	115-155	—-	5.0-6.0
	28-40	120-240	—-	5.6-6.6
	40-72	30-50	—-	5.6-6.6
184:				
Typic Cryorthents	0-1	115-155	—-	5.5-6.6
	1-49	10-20	—-	6.1-7.3
	49-72	5-10	—-	6.1-7.3
185:				
Typic Cryorthents, fill	0-30	5-15	—-	6.1-7.3
	30-63	5-15	—-	6.1-7.8
	63-72	5-10	—-	6.1-7.8
Urban land	—-	—-	—-	—-
186:				
Urban land	—-	—-	—-	—-
187:				
Water	—-	—-	—-	—-

Table 9. Water Features

(See text for definitions of terms used in this table. Ponding depth is the estimated range in the depth of water on the surface. Soil moisture status depth is the upper and lower depth below the soil surface.)

Map symbol and soil name	Hydro logic group	Month	Flooding		Ponding			Soil Moisture Status	
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
101:									
Bolio	D	Apr Jun	Rare	Brief	Frequent	Long	12 0	0 8	Wet
								8 72	Wet, frozen
		Jul Sep	Rare	Brief				0 5	Moist
								5 16	Wet
								16 72	Wet, frozen
102:									
Bradway	D	Apr Jun	Occasional	Brief	Frequent	Long	12 0	0 24	Wet
								24 72	Wet, frozen
		Jul Sep	Occasional	Brief	Frequent	Long	12 0	0 26	Wet
								26 72	Wet, frozen
103:									
Chatanika	D	Apr May	None		Frequent	Long	4 0	0 12	Wet
								12 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
104:									
Chatanika	D	Apr May	None		Frequent	Long	4 0	0 12	Wet
								12 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
105:									
Chatanika	D	Apr May	None		Frequent	Long	4 0	0 12	Wet
								12 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
106:									
Chatanika	D	Apr May	None		Frequent	Long	4 0	0 12	Wet
								12 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
107:									
Chatanika	D	Apr May	None		Frequent	Long	4 0	0 12	Wet
								12 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
Goldstream	D	Apr Jun	None		Frequent	Long	12 0	0 10	Wet
								10 72	Wet, frozen
		Jul Sep	None					0 8	Moist
								8 20	Wet
								20 72	Wet, frozen
108:									
Chena	A	Apr Sep	Rare	Brief	None			0 72	Dry to moist
111:									
Eielson	B	Apr	Occasional	Brief	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 47	Moist
								47 72	Wet
		May	Occasional	Brief	Frequent	Long	6 0	0 8	Wet
								8 18	Wet, frozen
								18 47	Moist
								47 72	Wet
		Jun Sep	Occasional	Brief				0 47	Dry to moist
								47 72	Wet

Table 9. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding			Soil Moisture Status	
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
112:									
Eielson	B	Apr	Occasional	Brief	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 47	Moist
								47 72	Wet
		May	Occasional	Brief	Frequent	Long	6 0	0 8	Wet
								8 18	Wet, frozen
								18 47	Moist
								47 72	Wet
		Jun Sep	Occasional	Brief				0 47	Dry to moist
								47 72	Wet
Piledriver	B	Apr	Rare	Brief	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 47	Moist
								47 72	Wet
		May	Rare	Brief	Frequent	Long	6 0	0 12	Wet
								12 22	Wet, frozen
								22 47	Moist
								47 72	Wet
		Jun Sep	Rare	Brief				0 47	Dry to moist
								47 72	Wet
113:									
Eielson	B	Apr	Occasional	Brief	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 47	Moist
								47 72	Wet
		May	Occasional	Brief	Frequent	Long	6 0	0 8	Wet
								8 18	Wet, frozen
								18 47	Moist
								47 72	Wet
		Jun Sep	Occasional	Brief				0 47	Dry to moist
								47 72	Wet
Tanana	D	Apr May	Rare	Brief	Frequent	Long	6 0	0 12	Wet
								12 72	Wet, frozen
		Jun	Rare	Brief				0 6	Moist
								6 18	Wet
								18 72	Wet, frozen
		Jul Sep	Rare	Brief				0 12	Moist
								12 25	Wet
								25 72	Wet, frozen
114:									
Ester	D	Apr Sep	None		None			0 4	Moist
								4 9	Wet
								9 72	Wet, frozen
115:									
Ester	D	Apr Sep	None		None			0 4	Moist
								4 9	Wet
								9 72	Wet, frozen
116:									
Fairbanks	B	Apr Sep	None		None			0 72	Dry to moist
117:									
Fairbanks	B	Apr Sep	None		None			0 72	Dry to moist
118:									
Fairbanks	B	Apr Sep	None		None			0 72	Dry to moist
119:									
Fairbanks	B	Apr Sep	None		None			0 72	Dry to moist
120:									
Fairbanks	B	Apr Sep	None		None			0 72	Dry to moist

Table 9. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding			Soil Moisture Status	
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
121:									
Fairbanks, strongly sloping	B	Apr Sep	None		None			0 72	Dry to moist
Fairbanks, steep	B	Apr Sep	None		None			0 72	Dry to moist
122:									
Fairbanks	B	Apr Sep	None		None			0 72	Dry to moist
Steese	B	Apr Sep	None		None			0 72	Dry to moist
123:									
Fairbanks	B	Apr Sep	None		None			0 72	Dry to moist
Steese	B	Apr Sep	None		None			0 72	Dry to moist
124:									
Fubar	C	Apr Sep	Rare	Brief	None			0 54	Dry to moist
								54 72	Wet
Piledriver	B	Apr	Rare	Brief	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 47	Moist
								47 72	Wet
		May	Rare	Brief	Frequent	Long	6 0	0 12	Wet
								12 22	Wet, frozen
								22 47	Moist
								47 72	Wet
		Jun Sep	Rare	Brief				0 47	Dry to moist
								47 72	Wet
125:									
Gilmore	D	Apr Sep	None		None			0 72	Dry to moist
126:									
Gilmore	D	Apr Sep	None		None			0 72	Dry to moist
127:									
Gilmore	D	Apr Sep	None		None			0 72	Dry to moist
128:									
Gilmore	D	Apr Sep	None		None			0 72	Dry to moist
129:									
Gilmore	D	Apr Sep	None		None			0 72	Dry to moist
130:									
Gilmore	D	Apr Sep	None		None			0 72	Dry to moist
131:									
Gilmore	D	Apr Sep	None		None			0 72	Dry to moist
Ester	D	Apr Sep	None		None			0 4	Moist
								4 9	Wet
								9 72	Wet, frozen
132:									
Gilmore	D	Apr Sep	None		None			0 72	Dry to moist
Steese	B	Apr Sep	None		None			0 72	Dry to moist
133:									
Goldstream	D	Apr Jun	None		Frequent	Long	12 0	0 10	Wet
								10 72	Wet, frozen
		Jul Sep	None					0 8	Moist
								8 20	Wet
								20 72	Wet, frozen

Table 9. Water Features—Continued

Map symbol and soil name	Hydro logic group	Month	Flooding		Ponding			Soil Moisture Status	
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
134:									
Goldstream	D	Apr Jun	None		Frequent	Long	12 0	0 10	Wet
								10 72	Wet, frozen
		Jul Sep	None					0 8	Moist
								8 20	Wet
								20 72	Wet, frozen
135:									
Goldstream	D	Apr Jun	None		Frequent	Long	12 0	0 10	Wet
								10 72	Wet, frozen
		Jul Sep	None					0 8	Moist
								8 20	Wet
								20 72	Wet, frozen
Histels	D	Apr Jun	None		Frequent	Long	12 0	0 10	Wet
								10 72	Wet, frozen
		Jul Sep	None					0 17	Wet
								17 72	Wet, frozen
136:									
Histels	D	Apr Jun	None		Frequent	Long	12 0	0 10	Wet
								10 72	Wet, frozen
		Jul Sep	None					0 17	Wet
								17 72	Wet, frozen
137:									
Jarvis	B	Apr	Rare	Brief	Occasional	Long	4 0	0 12	Wet
								12 22	Wet, frozen
								22 72	Dry to moist
		May	Rare	Brief				0 16	Wet
								16 24	Wet, frozen
								24 72	Dry to moist
		Jun Sep	Rare	Brief				0 72	Dry to moist
138:									
Jarvis	B	Apr	Rare	Brief	Occasional	Long	4 0	0 12	Wet
								12 22	Wet, frozen
								22 72	Dry to moist
		May	Rare	Brief				0 16	Wet
								16 24	Wet, frozen
								24 72	Dry to moist
		Jun Sep	Rare	Brief				0 72	Dry to moist
Chena	A	Apr Sep	Rare	Brief	None			0 72	Dry to moist
139:									
Jarvis	B	Apr	Rare	Brief	Occasional	Long	4 0	0 12	Wet
								12 22	Wet, frozen
								22 72	Dry to moist
		May	Rare	Brief				0 16	Wet
								16 24	Wet, frozen
								24 72	Dry to moist
		Jun Sep	Rare	Brief				0 72	Dry to moist
Salchaket	B	Apr	Rare	Brief	Frequent	Long	6 0	0 8	Wet
								8 18	Wet, frozen
								18 72	Dry to moist
		May	Rare	Brief	Frequent	Long	6 0	0 12	Wet
								12 22	Wet, frozen
								22 72	Dry to moist
		Jun Sep	Rare	Brief				0 72	Dry to moist
140:									
Lemeta	D	Apr Jun	Rare	Brief	Frequent	Long	12 0	0 20	Wet
								20 72	Wet, frozen
		Jul Sep	Rare	Brief				0 20	Wet
								20 72	Wet, frozen

Table 9. Water Features—Continued

Map symbol and soil name	Hydro logic group	Month	Flooding		Ponding			Soil Moisture Status	
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
141:									
Liscum	D	Apr	Rare	Brief	Frequent	Long	12 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	Rare	Brief	Frequent	Long	12 0	4 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	Rare	Brief	Frequent	Long	12 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul Sep	Rare	Brief				0 4	Moist
								4 72	Wet
Noonku	D	Apr	Occasional	Brief	Frequent	Long	12 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	Occasional	Brief	Frequent	Long	12 0	4 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	Occasional	Brief	Frequent	Long	12 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul Sep	Occasional	Brief				0 8	Moist
								8 72	Wet
142:									
Minto	B	Apr	None		None			0 4	Moist
								4 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		May	None		None			0 8	Moist
								8 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		Jun Sep	None		None			0 72	Dry to moist
143:									
Minto	B	Apr	None		None			0 4	Moist
								4 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		May	None		None			0 8	Moist
								8 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		Jun Sep	None		None			0 72	Dry to moist
144:									
Minto	B	Apr	None		None			0 4	Moist
								4 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		May	None		None			0 8	Moist
								8 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		Jun Sep	None		None			0 72	Dry to moist

Table 9. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding			Soil Moisture Status	
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
145:									
Minto	B	Apr	None		None			0 4	Moist
								4 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		May	None		None			0 8	Moist
								8 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		Jun Sep	None		None			0 72	Dry to moist
Chatanika	D	Apr May	None		Frequent	Long	4 0	0 12	Wet
								12 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
146:									
Minto	B	Apr	None		None			0 4	Moist
								4 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		May	None		None			0 8	Moist
								8 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		Jun Sep	None		None			0 72	Dry to moist
Chatanika	D	Apr May	None		Frequent	Long	4 0	0 12	Wet
								12 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
147:									
Minto	B	Apr	None		None			0 4	Moist
								4 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		May	None		None			0 8	Moist
								8 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		Jun Sep	None		None			0 72	Dry to moist
Chatanika	D	Apr May	None		Frequent	Long	4 0	0 12	Wet
								12 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
148:									
Minto	B	Apr	None		None			0 4	Moist
								4 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		May	None		None			0 8	Moist
								8 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		Jun Sep	None		None			0 72	Dry to moist
Chatanika	D	Apr May	None		Frequent	Long	4 0	0 12	Wet
								12 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
149:									
Mosquito	D	Apr Jun	Rare	Brief	Frequent	Long	12 0	0 12	Wet
								12 72	Wet, frozen
		Jul Sep	Rare	Brief				0 24	Wet
								24 72	Wet, frozen

Table 9. Water Features—Continued

Map symbol and soil name	Hydro logic group	Month	Flooding		Ponding			Soil Moisture Status	
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
150:									
Mosquito	D	Apr Jun	Rare	Brief	Frequent	Long	12 0	0 12	Wet
								12 72	Wet, frozen
		Jul Sep	Rare	Brief				0 24	Wet
								24 72	Wet, frozen
Noonku	D	Apr	Occasional	Brief	Frequent	Long	12 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	Occasional	Brief	Frequent	Long	12 0	4 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	Occasional	Brief	Frequent	Long	12 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul Sep	Occasional	Brief				0 8	Moist
								8 72	Wet
151:									
Noonku	D	Apr	Occasional	Brief	Frequent	Long	12 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	Occasional	Brief	Frequent	Long	12 0	4 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	Occasional	Brief	Frequent	Long	12 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul Sep	Occasional	Brief				0 8	Moist
								8 72	Wet
152:									
North Pole	D	Apr	Rare	Brief	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	Rare	Brief	Frequent	Long	6 0	4 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	Rare	Brief	Frequent	Long	6 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul	Rare	Brief				0 72	Wet
		Aug Sep	Rare	Brief				0 8	Moist
								8 72	Wet
153:									
North Pole	D	Apr	Rare	Brief	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	Rare	Brief	Frequent	Long	6 0	4 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	Rare	Brief	Frequent	Long	6 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul	Rare	Brief				0 72	Wet
		Aug Sep	Rare	Brief				0 8	Moist
								8 72	Wet
Mosquito	D	Apr Jun	Rare	Brief	Frequent	Long	12 0	0 12	Wet
								12 72	Wet, frozen
		Jul Sep	Rare	Brief				0 24	Wet
								24 72	Wet, frozen

Table 9. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding			Soil Moisture Status	
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
153:									
Liscum	D	Apr	Rare	Brief	Frequent	Long	12 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	Rare	Brief	Frequent	Long	12 0	4 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	Rare	Brief	Frequent	Long	12 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul Sep	Rare	Brief				0 4	Moist
								4 72	Wet
154:									
North Pole	D	Apr	Rare	Brief	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	Rare	Brief	Frequent	Long	6 0	4 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	Rare	Brief	Frequent	Long	6 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul	Rare	Brief				0 72	Wet
		Aug Sep	Rare	Brief				0 8	Moist
								8 72	Wet
Noonku	D	Apr	Occasional	Brief	Frequent	Long	12 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	Occasional	Brief	Frequent	Long	12 0	4 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	Occasional	Brief	Frequent	Long	12 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul Sep	Occasional	Brief				0 8	Moist
								8 72	Wet
155:									
Peede	D	Apr	Occasional	Brief	Frequent	Long	12 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	Occasional	Brief	Frequent	Long	12 0	4 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	Occasional	Brief	Frequent	Long	12 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul Sep	Occasional	Brief				0 8	Moist
								8 72	Wet
156:									
Peede	D	Apr	Occasional	Brief	Frequent	Long	12 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	Occasional	Brief	Frequent	Long	12 0	4 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	Occasional	Brief	Frequent	Long	12 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul Sep	Occasional	Brief				0 8	Moist
								8 72	Wet
Mosquito	D	Apr Jun	Rare	Brief	Frequent	Long	12 0	0 12	Wet
								12 72	Wet, frozen
		Jul Sep	Rare	Brief				0 24	Wet
								24 72	Wet, frozen

Table 9. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding			Soil Moisture Status	
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
157:									
Piledriver	B	Apr	Rare	Brief	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 47	Moist
								47 72	Wet
		May	Rare	Brief	Frequent	Long	6 0	0 12	Wet
								12 22	Wet, frozen
								22 47	Moist
								47 72	Wet
		Jun Sep	Rare	Brief				0 47	Dry to moist
								47 72	Wet
158:									
Piledriver	B	Apr	Rare	Brief	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 47	Moist
								47 72	Wet
		May	Rare	Brief	Frequent	Long	6 0	0 12	Wet
								12 22	Wet, frozen
								22 47	Moist
								47 72	Wet
		Jun Sep	Rare	Brief				0 47	Dry to moist
								47 72	Wet
Eielson	B	Apr	Occasional	Brief	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 47	Moist
								47 72	Wet
		May	Occasional	Brief	Frequent	Long	6 0	0 8	Wet
								8 18	Wet, frozen
								18 47	Moist
								47 72	Wet
		Jun Sep	Occasional	Brief				0 47	Dry to moist
								47 72	Wet
159:									
Piledriver	B	Apr	Rare	Brief	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 47	Moist
								47 72	Wet
		May	Rare	Brief	Frequent	Long	6 0	0 12	Wet
								12 22	Wet, frozen
								22 47	Moist
								47 72	Wet
		Jun Sep	Rare	Brief				0 47	Dry to moist
								47 72	Wet
Fubar	C	Apr Sep	Rare	Brief	None			0 54	Dry to moist
								54 72	Wet
163:									
Salchaket	B	Apr	Rare	Brief	Frequent	Long	6 0	0 8	Wet
								8 18	Wet, frozen
								18 72	Dry to moist
		May	Rare	Brief	Frequent	Long	6 0	0 12	Wet
								12 22	Wet, frozen
								22 72	Dry to moist
		Jun Sep	Rare	Brief				0 72	Dry to moist
164:									
Salchaket	B	Apr	Rare	Brief	Frequent	Long	6 0	0 8	Wet
								8 18	Wet, frozen
								18 72	Dry to moist
		May	Rare	Brief	Frequent	Long	6 0	0 12	Wet
								12 22	Wet, frozen
								22 72	Dry to moist
		Jun Sep	Rare	Brief				0 72	Dry to moist
Typic Cryorthents	B	Apr Sep	Rare	Brief	None			0 72	Dry to moist

Table 9. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding			Soil Moisture Status	
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
165:									
Saulich	D	Apr May	None		Frequent	Long	4 0	0 10	Wet
								10 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
166:									
Saulich	D	Apr May	None		Frequent	Long	4 0	0 10	Wet
								10 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
167:									
Saulich	D	Apr May	None		Frequent	Long	4 0	0 10	Wet
								10 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
168:									
Saulich	D	Apr May	None		Frequent	Long	4 0	0 10	Wet
								10 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
Minto	B	Apr	None		None			0 4	Moist
								4 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		May	None		None			0 8	Moist
								8 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		Jun Sep	None		None			0 72	Dry to moist
169:									
Saulich	D	Apr May	None		Frequent	Long	4 0	0 10	Wet
								10 72	Wet, frozen
		Jun Sep	None					0 8	Moist
								8 21	Wet
								21 72	Wet, frozen
Minto	B	Apr	None		None			0 4	Moist
								4 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		May	None		None			0 8	Moist
								8 20	Wet
								20 30	Wet, frozen
								30 72	Dry to moist
		Jun Sep	None		None			0 72	Dry to moist
170:									
Steese	B	Apr Sep	None		None			0 72	Dry to moist
171:									
Steese	B	Apr Sep	None		None			0 72	Dry to moist
172:									
Steese	B	Apr Sep	None		None			0 72	Dry to moist
173:									
Steese	B	Apr Sep	None		None			0 72	Dry to moist
174:									
Steese	B	Apr Sep	None		None			0 72	Dry to moist

Table 9. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding			Soil Moisture Status	
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
175:									
Steese	B	Apr Sep	None		None			0 72	Dry to moist
176:									
Steese	B	Apr Sep	None		None			0 72	Dry to moist
Gilmore	D	Apr Sep	None		None			0 72	Dry to moist
177:									
Steese	B	Apr Sep	None		None			0 72	Dry to moist
Gilmore	D	Apr Sep	None		None			0 72	Dry to moist
178:									
Steese	B	Apr Sep	None		None			0 72	Dry to moist
Gilmore	D	Apr Sep	None		None			0 72	Dry to moist
179:									
Steese	B	Apr Sep	None		None			0 72	Dry to moist
Gilmore	D	Apr Sep	None		None			0 72	Dry to moist
180:									
Tanacross	D	Apr May	Rare	Brief	Frequent	Long	6 0	0 8	Wet
								8 72	Wet, frozen
		Jun Sep	Rare	Brief				0 17	Wet
								17 72	Wet, frozen
181:									
Tanana	D	Apr May	Rare	Brief	Frequent	Long	6 0	0 12	Wet
								12 72	Wet, frozen
		Jun	Rare	Brief				0 6	Moist
								6 18	Wet
								18 72	Wet, frozen
		Jul Sep	Rare	Brief				0 12	Moist
								12 25	Wet
								25 72	Wet, frozen
182:									
Tanana	D	Apr May	Rare	Brief	Frequent	Long	6 0	0 12	Wet
								12 72	Wet, frozen
		Jun	Rare	Brief				0 6	Moist
								6 18	Wet
								18 72	Wet, frozen
		Jul Sep	Rare	Brief				0 12	Moist
								12 25	Wet
								25 72	Wet, frozen
Mosquito	D	Apr Jun	Rare	Brief	Frequent	Long	12 0	0 12	Wet
								12 72	Wet, frozen
		Jul Sep	Rare	Brief				0 24	Wet
								24 72	Wet, frozen
183:									
Typic Cryaquents	D	Apr	Frequent	Long	Frequent	Long	6 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	Frequent	Long	Frequent	Long	6 0	0 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	Frequent	Brief	Frequent	Long	6 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul Sep	Frequent	Brief	Frequent	Brief	6 0	0 72	Wet

Table 9. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding			Soil Moisture Status	
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
183:									
Histic Cryaquepts	D	Apr	None		Frequent	Long	12 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	None		Frequent	Long	12 0	0 12	Wet
								12 24	Wet, frozen
								24 72	Wet
		Jun	None		Frequent	Long	12 0	0 18	Wet
								18 22	Wet, frozen
								22 72	Wet
		Jul Sep	None					0 16	Moist
								16 72	Wet
Terric Cryofibrists	D	Apr	None		Frequent	Long	12 0	0 4	Wet
								4 14	Wet, frozen
								14 72	Wet
		May	None		Frequent	Long	12 0	0 12	Wet
								12 22	Wet, frozen
								22 72	Wet
		Jun	None		Frequent	Long	12 0	0 18	Wet
								18 20	Wet, frozen
								20 72	Wet
		Jul Sep	None		Frequent	Long	12 0	0 72	Wet
184:									
Typic Cryorthents	B	Apr Sep	Rare	Brief	None			0 72	Dry to moist
185:									
Typic Cryorthents, fill	B	Apr Sep	Rare	Brief	None			0 72	Dry to moist

Table 10. Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
101:								
Bolio	Permafrost	14-28	Strongly cemented	5-10	15-30	High	High	High
102:								
Bradway	Permafrost	18-35	Strongly cemented	---	---	High	Moderate	Moderate
103:								
Chatanika	Permafrost	12-39	Strongly cemented	---	---	High	Moderate	Moderate
104:								
Chatanika	Permafrost	12-39	Strongly cemented	---	---	High	Moderate	Moderate
105:								
Chatanika	Permafrost	12-39	Strongly cemented	---	---	High	Moderate	Moderate
106:								
Chatanika	Permafrost	12-39	Strongly cemented	---	---	High	Moderate	Moderate
107:								
Chatanika	Permafrost	12-39	Strongly cemented	---	---	High	Moderate	Moderate
Goldstream	Permafrost	14-24	Strongly cemented	1-6	6-12	High	High	High
108:								
Chena	none	---	---	---	---	Low	Moderate	Moderate
109:								
Dumps, landfill	none	---	---	---	---	---	---	---
110:								
Dumps, mine	none	---	---	---	---	---	---	---
111:								
Eielson	none	---	---	---	---	High	Moderate	Moderate
112:								
Eielson	none	---	---	---	---	High	Moderate	Moderate
Piledriver	none	---	---	---	---	High	Moderate	Moderate
113:								
Eielson	none	---	---	---	---	High	Moderate	Moderate
Tanana	Permafrost	16-47	Strongly cemented	---	---	High	Moderate	Moderate
114:								
Ester	Permafrost	7-30	Strongly cemented	---	---	High	High	High
	Bedrock (paralithic)	14-39	Strongly cemented					
115:								
Ester	Permafrost	7-30	Strongly cemented	---	---	High	High	High
	Bedrock (paralithic)	14-39	Strongly cemented					
116:								
Fairbanks	none	---	---	---	---	High	Moderate	Moderate

Table 10. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
117:								
Fairbanks	none	---	---	---	---	High	Moderate	Moderate
118:								
Fairbanks	none	---	---	---	---	High	Moderate	Moderate
119:								
Fairbanks	none	---	---	---	---	High	Moderate	Moderate
120:								
Fairbanks	none	---	---	---	---	High	Moderate	Moderate
121:								
Fairbanks, strongly sloping	none	---	---	---	---	High	Moderate	Moderate
Fairbanks, steep	none	---	---	---	---	High	Moderate	Moderate
122:								
Fairbanks	none	---	---	---	---	High	Moderate	Moderate
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
123:								
Fairbanks	none	---	---	---	---	High	Moderate	Moderate
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
124:								
Fubar	none	---	---	---	---	Low	Moderate	Moderate
Piledriver	none	---	---	---	---	High	Moderate	Moderate
125:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	---	---	Moderate	Moderate	Moderate
126:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	---	---	Moderate	Moderate	Moderate
127:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	---	---	Moderate	Moderate	Moderate
128:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	---	---	Moderate	Moderate	Moderate
129:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	---	---	Moderate	Moderate	Moderate
130:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	---	---	Moderate	Moderate	Moderate
131:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	---	---	Moderate	Moderate	Moderate
Ester	Permafrost	7-30	Strongly cemented	---	---	High	High	High
	Bedrock (paralithic)	14-39	Strongly cemented					

Table 10. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
132:								
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	---	---	Moderate	Moderate	Moderate
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
133:								
Goldstream	Permafrost	14-24	Strongly cemented	1-6	6-12	High	High	High
134:								
Goldstream	Permafrost	14-24	Strongly cemented	1-6	6-12	High	High	High
135:								
Goldstream	Permafrost	14-24	Strongly cemented	1-6	6-12	High	High	High
Histels	Permafrost	16-24	Strongly cemented	8-18	16-35	High	High	High
136:								
Histels	Permafrost	16-24	Strongly cemented	8-18	16-35	High	High	High
137:								
Jarvis	none	---	---	---	---	Moderate	Moderate	Moderate
138:								
Jarvis	none	---	---	---	---	Moderate	Moderate	Moderate
Chena	none	---	---	---	---	Low	Moderate	Moderate
139:								
Jarvis	none	---	---	---	---	Moderate	Moderate	Moderate
Salchaket	none	---	---	---	---	Moderate	Moderate	Moderate
140:								
Lemeta	Permafrost	15-24	Strongly cemented	8-16	16-32	High	High	High
141:								
Liscum	none	---	---	1-6	6-12	High	Moderate	Moderate
Noonku	none	---	---	---	---	High	Moderate	Moderate
142:								
Minto	none	---	---	---	---	High	High	High
143:								
Minto	none	---	---	---	---	High	High	High
144:								
Minto	none	---	---	---	---	High	High	High
145:								
Minto	none	---	---	---	---	High	High	High
Chatanika	Permafrost	12-39	Strongly cemented	---	---	High	Moderate	Moderate
146:								
Minto	none	---	---	---	---	High	High	High
Chatanika	Permafrost	12-39	Strongly cemented	---	---	High	Moderate	Moderate

Table 10. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
147:								
Minto	None	---	---	---	---	High	High	High
Chatanika	Permafrost	12-39	Strongly cemented	---	---	High	Moderate	Moderate
148:								
Minto	None	---	---	---	---	High	High	High
Chatanika	Permafrost	12-39	Strongly cemented	---	---	High	Moderate	Moderate
149:								
Mosquito	Permafrost	14-31	Strongly cemented	1-6	10-12	High	Moderate	Moderate
150:								
Mosquito	Permafrost	14-31	Strongly cemented	1-6	10-12	High	Moderate	Moderate
Noonku	None	---	---	---	---	High	Moderate	Moderate
151:								
Noonku	None	---	---	---	---	High	Moderate	Moderate
152:								
North Pole	None	---	---	---	---	High	Moderate	Moderate
153:								
North Pole	None	---	---	---	---	High	Moderate	Moderate
Mosquito	Permafrost	14-31	Strongly cemented	1-6	10-12	High	Moderate	Moderate
Liscum	None	---	---	1-6	6-12	High	Moderate	Moderate
154:								
North Pole	None	---	---	---	---	High	Moderate	Moderate
Noonku	None	---	---	---	---	High	Moderate	Moderate
155:								
Peede	None	---	---	---	---	High	Moderate	Moderate
156:								
Peede	None	---	---	---	---	High	Moderate	Moderate
Mosquito	Permafrost	14-31	Strongly cemented	1-6	10-12	High	Moderate	Moderate
157:								
Piledriver	None	---	---	---	---	High	Moderate	Moderate
158:								
Piledriver	None	---	---	---	---	High	Moderate	Moderate
Eielson	None	---	---	---	---	High	Moderate	Moderate
159:								
Piledriver	None	---	---	---	---	High	Moderate	Moderate
Fubar	None	---	---	---	---	Low	Moderate	Moderate
160:								
Pits, gravel	None	---	---	---	---	---	---	---
161:								
Pits, quarry	None	---	---	---	---	---	---	---
162:								
Riverwash	None	---	---	---	---	---	---	---

Table 10. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
163:								
Salchaket	none	---	---	---	---	Moderate	Moderate	Moderate
164:								
Salchaket	none	---	---	---	---	Moderate	Moderate	Moderate
Typic Cryorthents	none	---	---	---	---	Moderate	Moderate	Moderate
165:								
Saulich	Permafrost	14-24	Strongly cemented	4-8	6-12	High	High	High
166:								
Saulich	Permafrost	14-24	Strongly cemented	4-8	6-12	High	High	High
167:								
Saulich	Permafrost	14-24	Strongly cemented	4-8	6-12	High	High	High
168:								
Saulich	Permafrost	14-24	Strongly cemented	4-8	6-12	High	High	High
Minto	none	---	---	---	---	High	High	High
169:								
Saulich	Permafrost	14-24	Strongly cemented	4-8	6-12	High	High	High
Minto	none	---	---	---	---	High	High	High
170:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
171:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
172:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
173:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
174:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
175:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
176:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	---	---	Moderate	Moderate	Moderate
177:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	---	---	Moderate	Moderate	Moderate

Table 10. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
178:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	---	---	Moderate	Moderate	Moderate
179:								
Steese	Bedrock (paralithic)	20-40	Moderately cemented	---	---	Moderate	Moderate	Moderate
Gilmore	Bedrock (paralithic)	13-24	Moderately cemented	---	---	Moderate	Moderate	Moderate
180:								
Tanacross	Permafrost	10-28	Strongly cemented	1-8	8-16	High	High	High
181:								
Tanana	Permafrost	16-47	Strongly cemented	---	---	High	Moderate	Moderate
182:								
Tanana	Permafrost	16-47	Strongly cemented	---	---	High	Moderate	Moderate
Mosquito	Permafrost	14-31	Strongly cemented	1-6	10-12	High	Moderate	Moderate
183:								
Typic Cryaquents	none	---	---	---	---	High	Moderate	Moderate
Histic Cryaquepts	none	---	---	2-3	3-6	High	High	High
Terric Cryofibrists	none	---	---	8-10	16-20	High	Moderate	Moderate
184:								
Typic Cryorthents	none	---	---	---	---	Moderate	Moderate	Moderate
185:								
Typic Cryorthents, fill	none	---	---	---	---	Moderate	Moderate	Moderate
Urban land	none	---	---	---	---	---	---	---
186:								
Urban land	none	---	---	---	---	---	---	---
187:								
Water	none	---	---	---	---	---	---	---

Table 11. Land Capability

Map symbol and soil name	Land capability (non-irrigated)
101:	
Bolio	7w
102:	
Bradway	6w
103:	
Chatanika	6w
104:	
Chatanika	6w
105:	
Chatanika	6w
106:	
Chatanika	6w
107:	
Chatanika	6w
Goldstream	6w
108:	
Chena	6s
109:	
Dumps, landfill	—
110:	
Dumps, mine	—
111:	
Eielson	4w
112:	
Eielson	4w
Piledriver	4w
113:	
Eielson	4w
Tanana	5w
114:	
Ester	7e
115:	
Ester	7e
116:	
Fairbanks	3e
117:	
Fairbanks	4e
118:	
Fairbanks	6e
119:	
Fairbanks	6e
120:	
Fairbanks	7e

Table 11. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
121:	
Fairbanks, strongly sloping	4e
Fairbanks, steep	7e
122:	
Fairbanks	6e
Steese	6e
123:	
Fairbanks	6e
Steese	6e
124:	
Fubar	6s
Piledriver	4w
125:	
Gilmore	4s
126:	
Gilmore	4e
127:	
Gilmore	6e
128:	
Gilmore	6e
129:	
Gilmore	7e
130:	
Gilmore	7e
131:	
Ester	7w
Gilmore	6e
132:	
Gilmore	6e
Steese	4e
133:	
Goldstream	6w
134:	
Goldstream	6w
135:	
Goldstream	6w
Histels	7w
136:	
Histels	7w
137:	
Jarvis	3s
138:	
Jarvis	3s
Chena	6s

Table 11. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
139:	
Jarvis	3s
Salchaket	2c
140:	
Lemeta	7w
141:	
Liscum	6w
Noonku	5w
142:	
Minto	4s
143:	
Minto	4s
144:	
Minto	4e
145:	
Minto	4s
Chatanika	6w
146:	
Minto	4s
Chatanika	6w
147:	
Minto	4e
Chatanika	6w
148:	
Minto	6e
Chatanika	6e
149:	
Mosquito	6w
150:	
Mosquito	6w
Noonku	5w
151:	
Noonku	5w
152:	
North Pole	5w
153:	
North Pole	5w
Mosquito	6w
Liscum	6w
154:	
North Pole	5w
Noonku	5w
155:	
Peede	5w

Table 11. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
156:	
Peede	5w
Mosquito	6w
157:	
Piledriver	4s
158:	
Piledriver	4s
Eielson	3w
159:	
Piledriver	4s
Fubar	6s
160:	
Pits, gravel	—
161:	
Quarry pits	—
162:	
Riverwash	—
163:	
Salchaket	2c
164:	
Salchaket	2c
Typic Cryorthents	3s
165:	
Saulich	6w
166:	
Saulich	6w
167:	
Saulich	6e
168:	
Minto	4e
Saulich	6w
169:	
Saulich	6e
Minto	6e
170:	
Steese	3e
171:	
Steese	4e
172:	
Steese	6e
173:	
Steese	6e
174:	
Steese	7e

Table 11. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
175:	
Steese	7e
176:	
Steese	6e
Gilmore	6e
177:	
Steese	6e
Gilmore	6e
178:	
Steese	7e
Gilmore	7e
179:	
Steese	7e
Gilmore	7e
180:	
Tanacross	6w
181:	
Tanana	5w
182:	
Tanana	5w
Mosquito	6w
183:	
Typic Cryaquents	6w
Histic Cryaquepts	6w
Terric Cryofibrists	7w
184:	
Typic Cryorthents	3s
185:	
Typic Cryorthents, fill	3s
Urban land	—
186:	
Urban land	—
187:	
Water	—

Table 12. Forest Productivity

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
101:				
Bolio	black spruce	—	—	—
102:				
Bradway	—	—	—	—
103:				
Chatanika	black spruce	42	—	—
	white spruce	67	29	
104:				
Chatanika	black spruce	42	—	—
	white spruce	67	29	
105:				
Chatanika	black spruce	42	—	—
	white spruce	67	29	
106:				
Chatanika	black spruce	—	—	—
	white spruce	67	29	
107:				
Chatanika	black spruce	42	—	—
	white spruce	67	29	
Goldstream	black spruce	—	—	—
108:				
Chena	balsam poplar	—	—	white spruce
	white spruce	80	29	
109:				
Dumps, landfill	—	—	—	—
110:				
Dumps, mine	—	—	—	—
111:				
Eielson	balsam poplar	—	—	white spruce
	white spruce	90	43	
112:				
Eielson	balsam poplar	—	—	white spruce
	white spruce	90	43	
Piledriver	balsam poplar	—	—	white spruce
	white spruce	43	14	
113:				
Eielson	balsam poplar	—	—	white spruce
	white spruce	90	43	
Tanana	black spruce	22	—	—
	white spruce	55	14	
114:				
Ester	—	—	—	—
115:				
Ester	—	—	—	—
116:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	

Table 12. Forest Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
117:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
118:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
119:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
120:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
121:				
Fairbanks, strongly sloping	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
Fairbanks, steep	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
122:				
Fairbanks	white spruce	83	29	white spruce
	paper birch	60	43	
	quaking aspen	65	57	
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	—-	
123:				
Fairbanks	paper birch	60	43	white spruce
	quaking aspen	65	57	
	white spruce	83	29	
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	85	29	
124:				
Fubar	balsam poplar	—-	—-	paper birch, white spruce
	paper birch	—-	—-	
	quaking aspen	—-	—-	
	white spruce	79	29	
Piledriver	balsam poplar	—-	—-	white spruce
	white spruce	74	14	
125:				
Gilmore	black spruce	30	—-	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
126:				
Gilmore	black spruce	30	—-	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	

Table 12. Forest Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
127:				
Gilmore	black spruce	30	—-	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
128:				
Gilmore	black spruce	30	—-	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
129:				
Gilmore	black spruce	30	—-	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
130:				
Gilmore	black spruce	30	—-	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
131:				
Gilmore	black spruce	30	—-	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
Ester	—-	—-	—-	—-
132:				
Gilmore	black spruce	30	—-	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	—-	
133:				
Goldstream	black spruce	—-	—-	—-
134:				
Goldstream	black spruce	—-	—-	—-
135:				
Goldstream	black spruce	—-	—-	—-
Histels	black spruce	—-	—-	—-
136:				
Histels	black spruce	—-	—-	—-
137:				
Jarvis	paper birch	50	29	white spruce
	quaking aspen	60	57	
	white spruce	80	29	

Table 12. Forest Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
138:				
Jarvis	paper birch	50	29	white spruce
	quaking aspen	60	57	
	white spruce	80	29	
Chena	balsam poplar	—	—	white spruce
	white spruce	80	29	
139:				
Jarvis	paper birch	50	29	white spruce
	quaking aspen	60	57	
	white spruce	80	29	
Salchaket	white spruce	94	43	white spruce
	balsam poplar	—	—	
140:				
Lemeta	black spruce	—	—	—
141:				
Liscum	black spruce	—	—	—
	tamarack	—	—	
Noonku	—	—	—	—
142:				
Minto	white spruce	83	29	white spruce
143:				
Minto	white spruce	83	29	white spruce
144:				
Minto	white spruce	83	29	white spruce
145:				
Minto	white spruce	83	29	white spruce
Chatanika	black spruce	42	—	—
	white spruce	67	29	
146:				
Minto	white spruce	83	29	white spruce
Chatanika	black spruce	42	—	—
	white spruce	67	29	
147:				
Minto	white spruce	83	29	white spruce
Chatanika	black spruce	42	—	—
	white spruce	67	29	
148:				
Minto	white spruce	67	29	white spruce
Chatanika	black spruce	—	—	—
	white spruce	67	29	
149:				
Mosquito	black spruce	—	—	—
	tamarack	—	—	
150:				
Mosquito	black spruce	—	—	—
	tamarack	—	—	
Noonku	—	—	—	—

Table 12. Forest Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
151:				
Noonku	—	—	—	—
152:				
North Pole	tamarack	37	—	—
	black spruce	—	—	
153:				
North Pole	tamarack	37	—	—
	black spruce	—	—	
Mosquito	black spruce	—	—	—
	tamarack	—	—	
Liscum	black spruce	—	—	—
	tamarack	—	—	
154:				
North Pole	black spruce	—	—	—
	tamarack	—	—	
Noonku	—	—	—	—
155:				
Peede	—	—	—	—
156:				
Peede	—	—	—	—
Mosquito	black spruce	—	—	—
	tamarack	—	—	
157:				
Piledriver	balsam poplar	—	—	white spruce
	white spruce	74	14	
158:				
Piledriver	balsam poplar	—	—	white spruce
	white spruce	74	14	
Eielson	balsam poplar	—	—	white spruce
	white spruce	90	43	
159:				
Piledriver	balsam poplar	—	—	white spruce
	white spruce	74	14	
Fubar	balsam poplar	—	—	paper birch, white spruce
	paper birch	—	—	
	quaking aspen	—	—	
	white spruce	79	29	
160:				
Pits, gravel	—	—	—	—
161:				
Quarry pits	—	—	—	—
162:				
Riverwash	—	—	—	—
163:				
Salchaket	white spruce	94	43	white spruce
	balsam poplar	—	—	

Table 12. Forest Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
164:				
Salchaket	white spruce	94	43	white spruce
	balsam poplar	—	—	
Typic Cryorthents	—	—	—	—
165:				
Saulich	black spruce	—	—	—
166:				
Saulich	black spruce	—	—	—
167:				
Saulich	—	—	—	—
168:				
Saulich	—	—	—	—
Minto	white spruce	67	29	white spruce
169:				
Saulich	—	—	—	—
Minto	white spruce	67	29	white spruce
170:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	—	
171:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	—	
172:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	—	
173:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	—	
174:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	—	
175:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	72	29	
	black spruce	40	—	

Table 12. Forest Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			Cu. Ft./Acre	
176:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	85	29	
Gilmore	black spruce	—	—	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
177:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	85	29	
177:				
Gilmore	black spruce	—	—	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
178:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	85	29	
Gilmore	black spruce	—	—	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
179:				
Steese	paper birch	65	43	white spruce
	quaking aspen	70	72	
	white spruce	85	29	
Gilmore	black spruce	—	—	white spruce
	paper birch	38	14	
	quaking aspen	44	29	
	white spruce	68	29	
180:				
Tanacross	black spruce	—	—	—
181:				
Tanana	black spruce	22	—	—
	white spruce	55	14	
182:				
Tanana	black spruce	22	—	—
	white spruce	55	14	
Mosquito	black spruce	—	—	—
	tamarack	—	—	
183:				
Typic Cryaquents	—	—	—	—
Histic Cryaquepts	—	—	—	—
Terric Cryofibrists	—	—	—	—
184:				
Typic Cryorthents	—	—	—	—

Table 12. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			Cu. Ft./Acre	
185:				
Typic Cryorthents, fill	—	—	—	—
Urban land	—	—	—	—
186:				
Urban land	—	—	—	—
187:				
Water	—	—	—	—

Table 13. Forestland Management: Erosion Hazard, Road Limitations

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Hazard of erosion off-road or off-trail (Standard criteria)		Hazard of erosion on roads and trails (Standard criteria)		Limitations for roads on natural surface (Alaska criteria)		
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
101:							
Bolio	75	Slight		Slight		Very limited:	
						Ponding	1.00
102:							
Bradway	85	Slight		Slight		Very limited:	
						Ponding	1.00
						Flooding	1.00
						Wetness	1.00
						Low Strength	0.50
103:							
Chatanika	75	Slight		Slight		Very limited:	
						Wetness	1.00
						Ponding	0.50
						Low Strength	0.50
104:							
Chatanika	75	Slight		Moderate:		Very limited:	
				Slope/erodibility	0.50	Wetness	1.00
						Ponding	0.50
						Low Strength	0.50
105:							
Chatanika	80	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Wetness	1.00
						Ponding	0.50
						Slope	0.50
						Low Strength	0.50
106:							
Chatanika	80	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Wetness	1.00
						Ponding	0.50
						Low Strength	0.50
107:							
Chatanika	55	Slight		Slight		Very limited:	
						Wetness	1.00
						Ponding	0.50
						Low Strength	0.50
Goldstream	35	Slight		Slight		Very limited:	
						Ponding	1.00
						Low Strength	0.50
108:							
Chena	90	Slight		Slight		Not limited	
109:							
Dumps, landfill	100	Not rated		Not rated		Not rated	
110:							
Dumps, mine	100	Not rated		Not rated		Not rated	

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map unit	Hazard of erosion off-road or off-trail (Standard criteria)		Hazard of erosion on roads and trails (Standard criteria)		Limitations for roads on natural surface (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
111:							
Eielson	80	Slight		Slight		Very limited:	
						Flooding	1.00
						Ponding	0.50
						Low Strength	0.50
112:							
Eielson	60	Slight		Slight		Very limited:	
						Flooding	1.00
						Ponding	0.50
						Low Strength	0.50
Piledriver	30	Slight		Slight		Somewhat limited:	
						Ponding	0.50
						Low Strength	0.50
113:							
Eielson	50	Slight		Slight		Very limited:	
						Flooding	1.00
						Ponding	0.50
						Low Strength	0.50
Tanana	35	Slight		Slight		Very limited:	
						Wetness	1.00
						Ponding	0.50
						Low Strength	0.50
114:							
Ester	70	Severe:		Severe:		Very limited:	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
		Slope/erodibility	0.50	Slope/erodibility	0.95	Low Strength	0.50
115:							
Ester	75	Very severe:		Severe:		Very limited:	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
		Slope/erodibility	0.75	Slope/erodibility	0.95	Low Strength	0.50
116:							
Fairbanks	80	Slight		Moderate:		Somewhat limited:	
				Slope/erodibility	0.50	Low Strength	0.50
117:							
Fairbanks	80	Moderate:		Severe:		Somewhat limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Low Strength	0.50
118:							
Fairbanks	70	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
119:							
Fairbanks	80	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
120:							
Fairbanks	85	Severe:		Severe:		Very limited:	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map unit	Hazard of erosion off-road or off-trail (Standard criteria)		Hazard of erosion on roads and trails (Standard criteria)		Limitations for roads on natural surface (Alaska criteria)		
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
121:							
Fairbanks, strongly sloping	60	Moderate:		Severe:		Somewhat limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Low Strength	0.50
Fairbanks, steep	30	Severe:		Severe:		Very limited:	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
122:							
Fairbanks	55	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
Steese	30	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
123:							
Fairbanks	40	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
Steese	30	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
124:							
Fubar	50	Slight		Slight		Somewhat limited:	
						Low Strength	0.50
Piledriver	40	Slight		Slight		Somewhat limited:	
						Ponding	0.50
						Low Strength	0.50
125:							
Gilmore	80	Slight		Moderate:		Somewhat limited:	
				Slope/erodibility	0.50	Low Strength	0.50
126:							
Gilmore	70	Moderate:		Moderate:		Somewhat limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.50	Slope	0.50
						Low Strength	0.50
127:							
Gilmore	75	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
128:							
Gilmore	70	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
129:							
Gilmore	85	Severe:		Severe:		Very limited:	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
130:							
Gilmore	85	Very severe:		Severe:		Very limited:	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map unit	Hazard of erosion off-road or off-trail (Standard criteria)		Hazard of erosion on roads and trails (Standard criteria)		Limitations for roads on natural surface (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
131:							
Gilmore	40	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
Ester	40	Severe:		Severe:		Very limited:	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
		Slope/erodibility	0.75	Slope/erodibility	0.95	Low Strength	0.50
132:							
Gilmore	65	Slight		Moderate:		Somewhat limited:	
				Slope/erodibility	0.50	Slope	0.50
						Low Strength	0.50
Steese	33	Slight		Moderate:		Somewhat limited:	
				Slope/erodibility	0.50	Slope	0.50
						Low Strength	0.50
133:							
Goldstream	80	Slight		Slight		Very limited:	
						Ponding	1.00
						Low Strength	0.50
134:							
Goldstream	80	Slight		Moderate:		Very limited:	
				Slope/erodibility	0.50	Ponding	1.00
						Low Strength	0.50
135:							
Goldstream	50	Slight		Slight		Very limited:	
						Ponding	1.00
						Low Strength	0.50
Histels	45	Slight		Slight		Very limited:	
						Ponding	1.00
136:							
Histels	90	Slight		Slight		Very limited:	
						Ponding	1.00
137:							
Jarvis	75	Slight		Slight		Somewhat limited:	
						Low Strength	0.50
138:							
Jarvis	55	Slight		Slight		Somewhat limited:	
						Low Strength	0.50
Chena	35	Slight		Slight		Not limited	
139:							
Jarvis	45	Slight		Slight		Somewhat limited:	
						Low Strength	0.50
Salchaket	45	Slight		Slight		Very limited:	
						Wetness	1.00
						Ponding	0.50
						Low Strength	0.50
140:							
Lemeta	75	Slight		Slight		Very limited:	
						Ponding	1.00

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map unit	Hazard of erosion off-road or off-trail (Standard criteria)		Hazard of erosion on roads and trails (Standard criteria)		Limitations for roads on natural surface (Alaska criteria)		
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
141:							
Liscum	50	Slight		Slight		Very limited:	
						Ponding	1.00
						Wetness	1.00
						Low Strength	0.50
Noonku	45	Slight		Slight		Very limited:	
						Ponding	1.00
						Flooding	1.00
						Wetness	1.00
						Low Strength	0.50
142:							
Minto	80	Slight		Slight		Very limited:	
						Wetness	1.00
						Low Strength	0.50
143:							
Minto	70	Slight		Moderate:		Very limited:	
				Slope/erodibility	0.50	Wetness	1.00
						Low Strength	0.50
144:							
Minto	60	Slight		Severe:		Very limited:	
				Slope/erodibility	0.95	Wetness	1.00
						Slope	0.50
						Low Strength	0.50
145:							
Minto	45	Slight		Slight		Very limited:	
						Wetness	1.00
						Low Strength	0.50
Chatanika	40	Slight		Slight		Very limited:	
						Wetness	1.00
						Ponding	0.50
						Low Strength	0.50
146:							
Minto	40	Slight		Moderate:		Very limited:	
				Slope/erodibility	0.50	Wetness	1.00
						Low Strength	0.50
Chatanika	35	Slight		Moderate:		Very limited:	
				Slope/erodibility	0.50	Wetness	1.00
						Ponding	0.50
						Low Strength	0.50
147:							
Minto	45	Slight		Severe:		Very limited:	
				Slope/erodibility	0.95	Wetness	1.00
						Slope	0.50
						Low Strength	0.50
Chatanika	40	Slight		Severe:		Very limited:	
				Slope/erodibility	0.95	Wetness	1.00
						Ponding	0.50
						Slope	0.50
						Low Strength	0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map unit	Hazard of erosion off-road or off-trail (Standard criteria)		Hazard of erosion on roads and trails (Standard criteria)		Limitations for roads on natural surface (Alaska criteria)		
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
148:							
Minto	45	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Wetness	1.00
						Low Strength	0.50
Chatanika	40	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Wetness	1.00
						Slope	0.50
						Ponding	0.50
						Low Strength	0.50
149:							
Mosquito	85	Slight		Slight		Very limited:	
						Ponding	1.00
						Low Strength	0.50
150:							
Mosquito	45	Slight		Slight		Very limited:	
						Ponding	1.00
						Low Strength	0.50
Noonku	40	Slight		Slight		Very limited:	
						Ponding	1.00
						Flooding	1.00
						Wetness	1.00
						Low Strength	0.50
151:							
Noonku	80	Slight		Slight		Very limited:	
						Ponding	1.00
						Flooding	1.00
						Wetness	1.00
						Low Strength	0.50
152:							
North Pole	85	Slight		Slight		Very limited:	
						Ponding	1.00
						Wetness	1.00
153:							
North Pole	50	Slight		Slight		Very limited:	
						Ponding	1.00
						Wetness	1.00
Mosquito	30	Slight		Slight		Very limited:	
						Ponding	1.00
						Low Strength	0.50
Liscum	20	Slight		Slight		Very limited:	
						Ponding	1.00
						Wetness	1.00
						Low Strength	0.50
154:							
North Pole	55	Slight		Slight		Very limited:	
						Ponding	1.00
						Wetness	1.00
Noonku	25	Slight		Slight		Very limited:	
						Ponding	1.00
						Flooding	1.00
						Wetness	1.00
						Low Strength	0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map unit	Hazard of erosion off-road or off-trail (Standard criteria)		Hazard of erosion on roads and trails (Standard criteria)		Limitations for roads on natural surface (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
155:							
Peede	85	Slight		Slight		Very limited:	
						Ponding	1.00
						Flooding	1.00
						Wetness	1.00
						Low Strength	0.50
156:							
Peede	70	Slight		Slight		Very limited:	
						Ponding	1.00
						Flooding	1.00
						Wetness	1.00
						Low Strength	0.50
Mosquito	25	Slight		Slight		Very limited:	
						Ponding	1.00
						Low Strength	0.50
157:							
Piledriver	75	Slight		Slight		Somewhat limited:	
						Ponding	0.50
						Low Strength	0.50
158:							
Piledriver	50	Slight		Slight		Somewhat limited:	
						Ponding	0.50
						Low Strength	0.50
Eielson	35	Slight		Slight		Very limited:	
						Flooding	1.00
						Ponding	0.50
						Low Strength	0.50
159:							
Piledriver	50	Slight		Slight		Somewhat limited:	
						Ponding	0.50
						Low Strength	0.50
Fubar	40	Slight		Slight		Somewhat limited:	
						Low Strength	0.50
160:							
Pits, gravel	100	Not rated		Not rated		Not rated	
161:							
Pits, quarry	100	Not rated		Not rated		Not rated	
162:							
Riverwash	100	Not rated		Not rated		Not rated	
163:							
Salchaket	85	Slight		Slight		Very limited:	
						Wetness	1.00
						Ponding	0.50
						Low Strength	0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map unit	Hazard of erosion off-road or off-trail (Standard criteria)		Hazard of erosion on roads and trails (Standard criteria)		Limitations for roads on natural surface (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
164:							
Salchaket	45	Slight		Slight		Very limited:	
						Wetness	1.00
						Ponding	0.50
						Low Strength	0.50
Typic Cryorthents	40	Slight		Slight		Not limited	
165:							
Saulich	80	Slight		Moderate:		Very limited:	
				Slope/erodibility	0.50	Low Strength	1.00
						Ponding	0.50
166:							
Saulich	80	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Low Strength	1.00
						Ponding	0.50
						Slope	0.50
167:							
Saulich	75	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Low Strength	1.00
						Slope	1.00
						Ponding	0.50
168:							
Saulich	40	Slight		Moderate:		Very limited:	
				Slope/erodibility	0.50	Low Strength	1.00
						Ponding	0.50
						Slope	0.50
Minto	40	Slight		Severe:		Very limited:	
				Slope/erodibility	0.95	Wetness	1.00
						Low Strength	0.50
						Slope	0.50
169:							
Saulich	40	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Low Strength	1.00
						Slope	1.00
						Ponding	0.50
Minto	35	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Wetness	1.00
						Low Strength	0.50
170:							
Steese	80	Slight		Moderate:		Somewhat limited:	
				Slope/erodibility	0.50	Low Strength	0.50
171:							
Steese	80	Moderate:		Severe:		Somewhat limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Low Strength	0.50
172:							
Steese	70	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
173:							
Steese	75	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map unit	Hazard of erosion off-road or off-trail (Standard criteria)		Hazard of erosion on roads and trails (Standard criteria)		Limitations for roads on natural surface (Alaska criteria)		
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
174:							
Steese	85	Severe:		Severe:		Very limited:	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
175:							
Steese	90	Very severe:		Severe:		Very limited:	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
176:							
Steese	55	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
Gilmore	25	Moderate:		Moderate:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.50	Slope	1.00
						Low Strength	0.50
177:							
Steese	50	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
Gilmore	40	Moderate:		Severe:		Very limited:	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
178:							
Steese	50	Severe:		Severe:		Very limited:	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
Gilmore	40	Severe:		Severe:		Very limited:	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
179:							
Steese	45	Very severe:		Severe:		Very limited:	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
Gilmore	45	Very severe:		Severe:		Very limited:	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Low Strength	0.50
180:							
Tanacross	90	Slight		Slight		Somewhat limited:	
						Ponding	0.50
						Low Strength	0.50
181:							
Tanana	75	Slight		Slight		Very limited:	
						Wetness	1.00
						Ponding	0.50
						Low Strength	0.50
182:							
Tanana	60	Slight		Slight		Very limited:	
						Wetness	1.00
						Ponding	0.50
						Low Strength	0.50
Mosquito	20	Slight		Slight		Very limited:	
						Ponding	1.00
						Low Strength	0.50

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map unit	Hazard of erosion off-road or off-trail (Standard criteria)		Hazard of erosion on roads and trails (Standard criteria)		Limitations for roads on natural surface (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
183:							
Typic Cryaquents	30	Slight		Slight		Very limited:	
						Ponding	1.00
						Flooding	1.00
						Low Strength	0.50
Histic Cryaquepts	25	Slight		Slight		Very limited:	
						Ponding	1.00
						Low Strength	0.50
Terric Cryofibrists	20	Very Severe		Very Severe		Very limited:	
		High organic content	1.00	High organic content	1.00	Ponding	1.00
						Low Strength	0.50
184:							
Typic Cryorthents	80	Slight		Slight		Somewhat limited:	
						Low Strength	0.50
185:							
Typic Cryorthents, fill	45	Slight		Slight		Not limited	
Urban land	45	Not rated		Not rated		Not rated	
186:							
Urban land	100	Not rated		Not rated		Not rated	
187:							
Water	100	Not rated		Not rated		Not rated	

Table 14. Building Site Development: Structures

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
101:							
Bolio	75	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
102:							
Bradway	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.80	Depth to permafrost	0.80	Depth to permafrost	0.80
103:							
Chatanika	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
104:							
Chatanika	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
						Slope	0.12
105:							
Chatanika	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Slope	1.00
		Slope	0.16	Slope	0.16	Depth to permafrost	0.99
106:							
Chatanika	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
107:							
Chatanika	55	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
Goldstream	35	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
108:							
Chena	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
109:							
Dumps, landfill	100	Not rated		Not rated		Not rated	
110:							
Dumps, mine	100	Not rated		Not rated		Not rated	
111:							
Eielson	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
112:							
Eielson	60	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Piledriver	30	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
113:							
Eielson	50	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Tanana	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
114:							
Ester	70	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to soft bedrock	0.99	Content of organic matter	1.00
115:							
Ester	75	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to soft bedrock	0.99	Content of organic matter	1.00
116:							
Fairbanks	80	Not limited		Not limited		Somewhat limited	
						Slope	0.12
117:							
Fairbanks	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
118:							
Fairbanks	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
119:							
Fairbanks	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
120:							
Fairbanks	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
121:							
Fairbanks, strongly sloping	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
Fairbanks, steep	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
122:							
Fairbanks	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Steese	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
123:							
Fairbanks	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Steese	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
124:							
Fubar	50	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.35		
Piledriver	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
125:							
Gilmore	80	Somewhat limited		Very limited		Somewhat limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
						Slope	0.12
126:							
Gilmore	70	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	0.16	Slope	0.16	Slope	1.00
127:							
Gilmore	75	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to soft bedrock	1.00
128:							
Gilmore	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
129:							
Gilmore	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
130:							
Gilmore	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
131:							
Gilmore	40	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to soft bedrock	1.00
Ester	40	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to soft bedrock	0.99	Content of organic matter	1.00

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)		
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
132:							
Gilmore	65	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
						Slope	1.00
Steese	33	Not limited		Somewhat limited		Very limited	
				Depth to soft bedrock	0.20	Slope	1.00
133:							
Goldstream	80	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
134:							
Goldstream	80	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.12
135:							
Goldstream	50	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Histels	45	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
136:							
Histels	90	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
137:							
Jarvis	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
138:							
Jarvis	55	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Chena	35	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
139:							
Jarvis	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Salchaket	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
140:							
Lemeta	75	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
141:							
Liscum	50	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Noonku	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
142:							
Minto	80	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
143:							
Minto	70	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.12
144:							
Minto	60	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.04	Slope	0.04	Slope	1.00

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
145:							
Minto	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Chatanika	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
146:							
Minto	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.12
Chatanika	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
						Slope	0.12
147:							
Minto	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
Chatanika	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Slope	1.00
		Slope	0.04	Slope	0.04	Depth to permafrost	0.99
148:							
Minto	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
Chatanika	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to saturated zone	1.00
		Slope	0.63	Slope	0.63	Depth to permafrost	0.99
149:							
Mosquito	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to permafrost	0.92	Content of organic matter	1.00
		Depth to permafrost	0.92			Depth to permafrost	0.92

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
150:							
Mosquito	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to permafrost	0.92	Content of organic matter	1.00
		Depth to permafrost	0.92			Depth to permafrost	0.92
Noonku	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
151:							
Noonku	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
152:							
North Pole	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
153:							
North Pole	50	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Mosquito	30	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to permafrost	0.92	Content of organic matter	1.00
		Depth to permafrost	0.92			Depth to permafrost	0.92
Liscum	20	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
154:							
North Pole	55	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Noonku	25	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
155:							
Peede	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
156:							
Peede	70	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Mosquito	25	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to permafrost	0.92	Content of organic matter	1.00
		Depth to permafrost	0.92			Depth to permafrost	0.92
157:							
Piledriver	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
158:							
Piledriver	50	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Eielson	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
159:							
Piledriver	50	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Fubar	40	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.35		
160:							
Pits, gravel	100	Not rated		Not rated		Not rated	
161:							
Pits, quarry	100	Not rated		Not rated		Not rated	
162:							
Riverwash	100	Not rated		Not rated		Not rated	

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
163:							
Salchaket	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
164:							
Salchaket	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Typic Cryorthents	40	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
165:							
Saulich	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
						Slope	0.12
166:							
Saulich	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Slope	1.00
		Slope	0.16	Slope	0.16	Depth to permafrost	0.99
167:							
Saulich	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Content of organic matter	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
168:							
Saulich	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
						Slope	0.88
Minto	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.04	Slope	0.04	Slope	1.00

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
169:							
Saulich	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Content of organic matter	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
Minto	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
170:							
Steese	80	Not limited		Somewhat limited		Somewhat limited	
				Depth to soft bedrock	0.20	Slope	0.12
171:							
Steese	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Depth to soft bedrock	0.20	Slope	1.00
				Slope	0.16		
172:							
Steese	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
173:							
Steese	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
174:							
Steese	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
175:							
Steese	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
176:							
Steese	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
Gilmore	25	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to soft bedrock	1.00

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
177:							
Steese	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
Gilmore	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
178:							
Steese	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
Gilmore	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
179:							
Steese	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
Gilmore	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
180:							
Tanacross	90	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
181:							
Tanana	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
182:							
Tanana	60	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)		
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
182:							
Mosquito	20	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to permafrost	0.92	Content of organic matter	1.00
		Depth to permafrost	0.92			Depth to permafrost	0.92
183:							
Typic Cryaquents	30	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Histic Cryaquepts	25	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Terric Cryofibrists	20	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00			Content of organic matter	1.00
184:							
Typic Cryorthents	80	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
185:							
Typic Cryorthents, fill	45	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
Urban land	45	Not rated		Not rated		Not rated	
186:							
Urban land	100	Not rated		Not rated		Not rated	
187:							
Water	100	Not rated		Not rated		Not rated	

Table 15. Building Site Development: Site Improvements

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
101:					
Bolio	75	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Cutbanks cave	0.10
		Frost action	1.00		
102:					
Bradway	85	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Depth to permafrost	0.80
		Depth to permafrost	0.80	Flooding	0.60
103:					
Chatanika	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Cutbanks cave	0.10
104:					
Chatanika	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Cutbanks cave	0.10
105:					
Chatanika	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Slope	0.16
		Slope	0.16	Cutbanks cave	0.10
106:					
Chatanika	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Slope	1.00
		Slope	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Cutbanks cave	0.10
107:					
Chatanika	55	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Cutbanks cave	0.10
Goldstream	35	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
108:					
Chena	90	Somewhat limited:		Very limited:	
		Flooding	0.40	Cutbanks cave	1.00
109:					
Dumps, landfill	100	Not rated		Not rated	
110:					
Dumps, mine	100	Not rated		Not rated	
111:					
Eielson	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
112:					
Eielson	60	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
Piledriver	30	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
113:					
Eielson	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
Tanana	35	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.86
		Depth to permafrost	0.86	Cutbanks cave	0.10
		Flooding	0.40		
114:					
Ester	70	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to soft bedrock	0.99
				Cutbanks cave	0.10
115:					
Ester	75	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to soft bedrock	0.99
				Cutbanks cave	0.10

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
116:					
Fairbanks	80	Very limited:		Somewhat limited:	
		Frost action	1.00	Cutbanks cave	0.50
117:					
Fairbanks	80	Very limited:		Somewhat limited:	
		Frost action	1.00	Cutbanks cave	0.50
		Slope	0.16	Slope	0.16
118:					
Fairbanks	70	Very limited:		Very limited:	
		Frost action	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.50
119:					
Fairbanks	80	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	0.50
120:					
Fairbanks	85	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	0.50
121:					
Fairbanks, strongly sloping	60	Very limited:		Somewhat limited:	
		Frost action	1.00	Cutbanks cave	0.50
		Slope	0.16	Slope	0.16
Fairbanks, steep	30	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	0.50
122:					
Fairbanks	55	Very limited:		Very limited:	
		Frost action	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.50
Steese	30	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
				Depth to soft bedrock	0.20
123:					
Fairbanks	40	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	0.50
Steese	30	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
				Depth to soft bedrock	0.20
124:					
Fubar	50	Somewhat limited:		Very limited:	
		Flooding	0.40	Cutbanks cave	1.00
				Depth to saturated zone	0.35
Piledriver	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
125:					
Gilmore	80	Somewhat limited:		Very limited:	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Frost action	0.50	Cutbanks cave	0.50
126:					
Gilmore	70	Somewhat limited:		Very limited:	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Frost action	0.50	Cutbanks cave	0.50
		Slope	0.16	Slope	0.16
127:					
Gilmore	75	Very limited:		Very limited:	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
128:					
Gilmore	70	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
129:					
Gilmore	85	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
130:					
Gilmore	85	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
131:					
Gilmore	40	Very limited:		Very limited:	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
Ester	40	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to soft bedrock	0.99
				Cutbanks cave	0.10
132:					
Gilmore	65	Somewhat limited:		Very limited:	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Frost action	0.50	Cutbanks cave	0.50
Steese	33	Somewhat limited:		Somewhat limited:	
		Frost action	0.50	Cutbanks cave	0.50
				Depth to soft bedrock	0.20

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
133:					
Goldstream	80	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10
134:					
Goldstream	80	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10
135:					
Goldstream	50	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10
Histels	45	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Cutbanks cave	0.10
		Frost action	1.00		
136:					
Histels	90	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Cutbanks cave	0.10
		Frost action	1.00		
137:					
Jarvis	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
138:					
Jarvis	55	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
Chena	35	Somewhat limited:		Very limited:	
		Flooding	0.40	Cutbanks cave	1.00
139:					
Jarvis	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
Salchaket	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
140:					
Lemeta	75	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Content of organic matter	1.00
		Frost action	1.00	Cutbanks cave	0.10
141:					
Liscum	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
Noonku	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
142:					
Minto	80	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.50
143:					
Minto	70	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.50
144:					
Minto	60	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.50
		Slope	0.04	Slope	0.04
145:					
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.50
Chatanika	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Cutbanks cave	0.10
146:					
Minto	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.50
Chatanika	35	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Cutbanks cave	0.10

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
147:					
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.50
		Slope	0.04	Slope	0.04
Chatanika	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Cutbanks cave	0.10
		Slope	0.04	Slope	0.04
148:					
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.50
Chatanika	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Slope	0.63
		Slope	0.63	Cutbanks cave	0.10
149:					
Mosquito	85	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Cutbanks cave	0.10
		Flooding	0.40		
150:					
Mosquito	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Cutbanks cave	0.10
		Flooding	0.40		
Noonku	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
151:					
Noonku	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
152:					
North Pole	85	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
153:					
North Pole	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
Mosquito	30	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Cutbanks cave	0.10
		Flooding	0.40		
Liscum	20	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
154:					
North Pole	55	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
Noonku	25	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
155:					
Peede	85	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10
156:					
Peede	70	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10
Mosquito	25	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Cutbanks cave	0.10
		Flooding	0.40		
157:					
Piledriver	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
158:					
Piledriver	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
Eielson	35	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Flooding	0.60
159:					
Piledriver	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	0.40		
Fubar	40	Somewhat limited:		Very limited:	
		Flooding	0.40	Cutbanks cave	1.00
				Depth to saturated zone	0.35
160:					
Pits, gravel	100	Not rated		Not rated	
161:					
Pits, quarry	100	Not rated		Not rated	
162:					
Riverwash	100	Not rated		Not rated	
163:					
Salchaket	85	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
164:					
Salchaket	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
Typic Cryorthents	40	Somewhat limited:		Very limited:	
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
165:					
Saulich	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Content of organic matter	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99
				Cutbanks cave	0.10

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
166:					
Saulich	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Content of organic matter	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99
		Slope	0.16	Slope	0.16
167:					
Saulich	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Content of organic matter	1.00
		Slope	1.00	Slope	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99
168:					
Saulich	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Content of organic matter	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99
				Cutbanks cave	0.10
Minto	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.50
		Slope	0.04	Slope	0.04
169:					
Saulich	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Content of organic matter	1.00
		Slope	1.00	Slope	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99
Minto	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.50
170:					
Steese	80	Somewhat limited:		Somewhat limited:	
		Frost action	0.50	Cutbanks cave	0.50
				Depth to soft bedrock	0.20
171:					
Steese	80	Somewhat limited:		Somewhat limited:	
		Frost action	0.50	Cutbanks cave	0.50
		Slope	0.16	Depth to soft bedrock	0.20
				Slope	0.16
172:					
Steese	70	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
				Depth to soft bedrock	0.20
173:					
Steese	75	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
				Depth to soft bedrock	0.20

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
174:					
Steese	85	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
				Depth to soft bedrock	0.20
175:					
Steese	90	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
				Depth to soft bedrock	0.20
176:					
Steese	55	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
				Depth to soft bedrock	0.20
Gilmore	25	Very limited:		Very limited:	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
177:					
Steese	50	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
				Depth to soft bedrock	0.20
Gilmore	40	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
178:					
Steese	50	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
				Depth to soft bedrock	0.20
Gilmore	40	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
179:					
Steese	45	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
				Depth to soft bedrock	0.20
Gilmore	45	Very limited:		Very limited:	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.50
180:					
Tanacross	90	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10
		Subsidence	1.00		

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets (Standard criteria)		Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
181:					
Tanana	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.86
		Depth to permafrost	0.86	Cutbanks cave	0.10
		Flooding	0.40		
182:					
Tanana	60	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.86
		Depth to permafrost	0.86	Cutbanks cave	0.10
		Flooding	0.40		
Mosquito	20	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to permafrost	0.92
		Depth to permafrost	0.92	Cutbanks cave	0.10
		Flooding	0.40		
183:					
Typic Cryaquents	30	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.80
		Flooding	1.00	Cutbanks cave	0.10
Histic Cryaquepts	25	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10
Terric Cryofibrists	20	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Content of organic matter	1.00
		Frost action	1.00	Cutbanks cave	0.10
184:					
Typic Cryorthents	80	Somewhat limited:		Very limited:	
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
185:					
Typic Cryorthents, fill	45	Somewhat limited:		Very limited:	
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40		
Urban land	45	Not rated		Not rated	
186:					
Urban land	100	Not rated		Not rated	
187:					
Water	100	Not rated		Not rated	

Table 16. Sanitary Facilities: Sewage Treatment

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
101:					
Bolio	75	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	Seepage	0.50
102:					
Bradway	85	Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	Depth to permafrost	0.80
103:					
Chatanika	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to permafrost	0.99
		Depth to cemented pan	1.00	Seepage	0.50
		Depth to permafrost	0.99		
104:					
Chatanika	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to permafrost	0.99
		Depth to cemented pan	1.00	Slope	0.68
		Depth to permafrost	0.99	Seepage	0.50
105:					
Chatanika	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Seepage	0.50
106:					
Chatanika	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to permafrost	0.99
		Depth to cemented pan	1.00	Seepage	0.50

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
107:					
Chatanika	55	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to permafrost	0.99
		Depth to cemented pan	1.00	Seepage	0.50
		Depth to permafrost	0.99		
Goldstream	35	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	Seepage	0.53
108:					
Chena	90	Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00		
		Depth to saturated zone	1.00		
		Flooding	0.40		
109:					
Dumps, landfill	100	Not rated		Not rated	
110:					
Dumps, mine	100	Not rated		Not rated	
111:					
Eielson	80	Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
112:					
Eielson	60	Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
Piledriver	30	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
113:					
Eielson	50	Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
Tanana	35	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to permafrost	0.86
		Depth to cemented pan	1.00	Seepage	0.53
		Depth to permafrost	0.86		
114:					
Ester	70	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
115:					
Ester	75	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
116:					
Fairbanks	80	Very limited:		Somewhat limited:	
		Depth to bedrock	1.00	Slope	0.68
		Depth to cemented pan	1.00	Seepage	0.53
		Depth to saturated zone	1.00		
117:					
Fairbanks	80	Very limited:		Very limited:	
		Depth to bedrock	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	0.53
		Depth to saturated zone	1.00		
		Slope	0.16		
118:					
Fairbanks	70	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
		Depth to saturated zone	1.00		

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
119:					
Fairbanks	80	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
		Depth to saturated zone	1.00		
120:					
Fairbanks	85	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
		Depth to saturated zone	1.00		
121:					
Fairbanks, strongly sloping	60	Very limited:		Very limited:	
		Depth to bedrock	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	0.53
		Depth to saturated zone	1.00		
		Slope	0.16		
Fairbanks, steep	30	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
		Depth to saturated zone	1.00		
122:					
Fairbanks	55	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
		Depth to saturated zone	1.00		
Steese	30	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
123:					
Fairbanks	40	Very limited:		Very limited:	
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
		Depth to saturated zone	1.00		
Steese	30	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
124:					
Fubar	50	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	0.17
		Depth to cemented pan	1.00		
		Flooding	0.40		
Piledriver	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		
125:					
Gilmore	80	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Slope	0.68
126:					
Gilmore	70	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to cemented pan	1.00	Slope	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Slope	0.16		
127:					
Gilmore	75	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
128:					
Gilmore	70	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
129:					
Gilmore	85	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
130:					
Gilmore	85	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
131:					
Gilmore	40	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
Ester	40	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
132:					
Gilmore	65	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Slope	1.00
Steese	33	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Slope	1.00
133:					
Goldstream	80	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	Seepage	0.53
134:					
Goldstream	80	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	Slope	0.68

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
135:					
Goldstream	50	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	Seepage	0.53
Histels	45	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	0.50
136:					
Histels	90	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	0.50
137:					
Jarvis	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		
138:					
Jarvis	55	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		
Chena	35	Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00		
		Depth to saturated zone	1.00		
		Flooding	0.40		
139:					
Jarvis	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		
Salchaket	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
140:					
Lemeta	75	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Subsidence	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
141:					
Liscum	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	Seepage	0.53
		Flooding	0.40		
Noonku	45	Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
142:					
Minto	80	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Massive ice possible below 6 feet, high subsidence potential	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
143:					
Minto	70	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Massive ice possible below 6 feet, high subsidence potential	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00
		Depth to bedrock	1.00	Slope	0.68
		Depth to cemented pan	1.00	Seepage	0.53
144:					
Minto	60	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Slope	1.00
		Massive ice possible below 6 feet, high subsidence potential	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00
		Depth to cemented pan	1.00	Seepage	0.53
		Slope	0.04		

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
145:					
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Massive ice possible below 6 feet, high subsidence potential	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
Chatanika	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to permafrost	0.99
		Depth to cemented pan	1.00	Seepage	0.50
		Depth to permafrost	0.99		
146:					
Minto	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Massive ice possible below 6 feet, high subsidence potential	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00
		Depth to bedrock	1.00	Slope	0.68
		Depth to cemented pan	1.00	Seepage	0.53
Chatanika	35	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to permafrost	0.99
		Depth to cemented pan	1.00	Slope	0.68
		Depth to permafrost	0.99	Seepage	0.50
147:					
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Slope	1.00
		Massive ice possible below 6 feet, high subsidence potential	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00
		Depth to cemented pan	1.00	Seepage	0.53
		Slope	0.04		
Chatanika	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Seepage	0.50

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
148:					
Minto	45	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Slope	1.00
		Massive ice possible below 6 feet, high subsidence potential	1.00	Depth to saturated zone	1.00
		Slope	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
Chatanika	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	Depth to permafrost	0.99
		Depth to permafrost	0.99	Seepage	0.50
149:					
Mosquito	85	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.92	Depth to permafrost	0.92
150:					
Mosquito	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.92	Depth to permafrost	0.92
Noonku	40	Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
151:					
Noonku	80	Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
152:					
North Pole	85	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		
153:					
North Pole	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		
Mosquito	30	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.92	Depth to permafrost	0.92
Liscum	20	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	Seepage	0.53
		Flooding	0.40		
154:					
North Pole	55	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		
Noonku	25	Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
155:					
Peede	85	Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	0.50
		Depth to cemented pan	1.00		

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
156:					
Peede	70	Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	0.50
		Depth to cemented pan	1.00		
Mosquito	25	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.92	Depth to permafrost	0.92
157:					
Piledriver	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		
158:					
Piledriver	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		
Eielson	35	Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
159:					
Piledriver	50	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		
Fubar	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	0.17
		Depth to cemented pan	1.00		
		Flooding	0.40		

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
160:					
Pits, gravel	100	Not rated		Not rated	
161:					
Pits, quarry	100	Not rated		Not rated	
162:					
Riverwash	100	Not rated		Not rated	
163:					
Salchaket	85	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		
164:					
Salchaket	45	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00		
		Flooding	0.40		
Typic Cryorthents	40	Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00		
		Depth to saturated zone	1.00		
		Filtering capacity	0.50		
		Flooding	0.40		
165:					
Saulich	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99
166:					
Saulich	80	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to permafrost	0.99	Depth to saturated zone	1.00
167:					
Saulich	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
168:					
Saulich	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Slope	1.00
Minto	40	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Massive ice possible below 6 feet, high subsidence potential	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00
		Depth to bedrock	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	0.53
		Slope	0.04		
169:					
Saulich	40	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
Minto	35	Very limited:		Very limited:	
		Depth to saturated zone	1.00	Slope	1.00
		Massive ice possible below 6 feet, high subsidence potential	1.00	Depth to saturated zone	1.00
		Slope	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00
		Depth to bedrock	1.00	Seepage	0.53
		Depth to cemented pan	1.00		
170:					
Steese	80	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Slope	0.68
171:					
Steese	80	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Depth to cemented pan	1.00	Slope	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Slope	0.16		

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
172:					
Steese	70	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
173:					
Steese	75	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
174:					
Steese	85	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
175:					
Steese	90	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
176:					
Steese	55	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
Gilmore	25	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
177:					
Steese	50	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
Gilmore	40	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
178:					
Steese	50	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
Gilmore	40	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
179:					
Steese	45	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
Gilmore	45	Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to cemented pan	1.00	Seepage	1.00
		Depth to saturated zone	1.00		
180:					
Tanacross	90	Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	Seepage	0.53
181:					
Tanana	75	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to permafrost	0.86
		Depth to cemented pan	1.00	Seepage	0.53
		Depth to permafrost	0.86		
182:					
Tanana	60	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to permafrost	0.86
		Depth to cemented pan	1.00	Seepage	0.53
		Depth to permafrost	0.86		
Mosquito	20	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.92	Depth to permafrost	0.92

Table 16. Sanitary Facilities: Sewage Treatment—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
183:					
Typic Cryaquents	30	Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	0.01
		Depth to cemented pan	1.00		
Histic Cryaquepts	25	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
Terric Cryofibrists	20	Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00
184:					
Typic Cryorthents	80	Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00		
		Depth to saturated zone	1.00		
		Flooding	0.40		
		Restricted permeability	0.31		
185:					
Typic Cryorthents, fill	45	Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00		
		Depth to saturated zone	1.00		
		Filtering capacity	0.50		
		Flooding	0.40		
Urban land	45	Not rated		Not rated	
186:					
Urban land	100	Not rated		Not rated	
187:					
Water	100	Not rated		Not rated	

Table 17. Sanitary Facilities: Landfill

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)		
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
101:								
Bolio	75	Very limited:		Very limited:		Very limited:		
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00	
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Content of organic matter	1.00	Flooding	0.40	Content of organic matter	1.00	
		Flooding	0.40					
102:								
Bradway	85	Very limited:		Very limited:		Very limited:		
		Flooding	1.00	Flooding	1.00	Ponding	1.00	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00	
		Ponding	1.00	Depth to saturated zone	1.00	Too Sandy	1.00	
		Too Sandy	1.00	Seepage	1.00	Depth to permafrost	0.80	
		Depth to permafrost	0.80	Depth to permafrost	0.80	Seepage	0.52	
103:								
Chatanika	75	Very limited:		Very limited:		Very limited:		
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00	
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99	
104:								
Chatanika	75	Very limited:		Very limited:		Very limited:		
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00	
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99	
105:								
Chatanika	80	Very limited:		Very limited:		Very limited:		
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00	
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99	
		Slope	0.16	Slope	0.16	Slope	0.16	
106:								
Chatanika	80	Very limited:		Very limited:		Very limited:		
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00	
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Slope	1.00	Slope	1.00	Slope	1.00	
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99	
107:								
Chatanika	55	Very limited:		Very limited:		Very limited:		
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00	
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99	
Goldstream	35	Very limited:		Very limited:		Very limited:		
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00	
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00	

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
108:							
Chena	90	Very limited:		Very limited:		Very limited:	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	1.00
109:							
Dumps, landfill	100	Not rated		Not rated		Not rated	
110:							
Dumps, mine	100	Not rated		Not rated		Not rated	
111:							
Eielson	80	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				
112:							
Eielson	60	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				
Piledriver	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.16
113:							
Eielson	50	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				
Tanana	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
		Flooding	0.40	Flooding	0.40		
114:							
Ester	70	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00			Seepage	1.00

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
115:							
Ester	75	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00			Seepage	1.00
116:							
Fairbanks	80	Not limited		Not limited		Not limited	
117:							
Fairbanks	80	Somewhat limited:		Somewhat limited:		Somewhat limited:	
		Slope	0.16	Slope	0.16	Slope	0.16
118:							
Fairbanks	70	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
119:							
Fairbanks	80	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
120:							
Fairbanks	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
121:							
Fairbanks, strongly sloping	60	Somewhat limited:		Somewhat limited:		Somewhat limited:	
		Slope	0.16	Slope	0.16	Slope	0.16
Fairbanks, steep	30	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
122:							
Fairbanks	55	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
Steese	30	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
123:							
Fairbanks	40	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
Steese	30	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		
124:							
Fubar	50	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too Sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too Sandy	1.00	Flooding	0.40	Gravel content	1.00
		Flooding	0.40				
Piledriver	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.16

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
125:							
Gilmore	80	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
126:							
Gilmore	70	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
		Slope	0.16	Slope	0.16	Slope	0.16
127:							
Gilmore	75	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
128:							
Gilmore	70	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
129:							
Gilmore	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
130:							
Gilmore	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
131:							
Gilmore	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
Ester	40	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00			Seepage	1.00
132:							
Gilmore	65	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
Steese	33	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00		
133:							
Goldstream	80	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
134:							
Goldstream	80	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
135:							
Goldstream	50	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Histels	45	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00			Content of organic matter	1.00
136:							
Histels	90	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00			Content of organic matter	1.00
137:							
Jarvis	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.66
138:							
Jarvis	55	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.66
Chena	35	Very limited:		Very limited:		Very limited:	
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	1.00
139:							
Jarvis	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.66
Salchaket	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Flooding	0.40	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
		Flooding	0.40				

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
140:							
Lemeta	75	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Content of organic matter	1.00
141:							
Liscum	50	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Flooding	0.40		
		Flooding	0.40				
Noonku	45	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				
142:							
Minto	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
143:							
Minto	70	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
144:							
Minto	60	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.04	Slope	0.04	Slope	0.04
145:							
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Chatanika	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
146:							
Minto	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Chatanika	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
147:							
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.04	Slope	0.04	Slope	0.04
Chatanika	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
		Slope	0.04	Slope	0.04	Slope	0.04
148:							
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Chatanika	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
		Slope	0.63	Slope	0.63	Slope	0.63
149:							
Mosquito	85	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to permafrost	0.92	Seepage	1.00
		Depth to permafrost	0.92	Flooding	0.40	Content of organic matter	1.00
		Flooding	0.40			Depth to permafrost	0.92
150:							
Mosquito	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to permafrost	0.92	Seepage	1.00
		Depth to permafrost	0.92	Flooding	0.40	Content of organic matter	1.00
		Flooding	0.40			Depth to permafrost	0.92
Noonku	40	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				
151:							
Noonku	80	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
152:							
North Pole	85	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.01
153:							
North Pole	50	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.01
Mosquito	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to permafrost	0.92	Seepage	1.00
		Depth to permafrost	0.92	Flooding	0.40	Content of organic matter	1.00
		Flooding	0.40			Depth to permafrost	0.92
Liscum	20	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Flooding	0.40		
		Flooding	0.40				
154:							
North Pole	55	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.01
Noonku	25	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				
155:							
Peede	85	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
156:							
Peede	70	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
Mosquito	25	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to permafrost	0.92	Seepage	1.00
		Depth to permafrost	0.92	Flooding	0.40	Content of organic matter	1.00
		Flooding	0.40			Depth to permafrost	0.92
157:							
Piledriver	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.16
158:							
Piledriver	50	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.16
Eielson	35	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
		Seepage	1.00				
159:							
Piledriver	50	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Seepage	1.00	Too Sandy	1.00
		Too Sandy	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40			Gravel content	0.16
Fubar	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too Sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too Sandy	1.00	Flooding	0.40	Gravel content	1.00
		Flooding	0.40				
160:							
Pits, gravel	100	Not rated		Not rated		Not rated	

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
161:							
Pits, quarry	100	Not rated		Not rated		Not rated	
162:							
Riverwash	100	Not rated		Not rated		Not rated	
163:							
Salchaket	85	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Flooding	0.40	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
		Flooding	0.40				
164:							
Salchaket	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Flooding	0.40	Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
		Flooding	0.40				
Typic Cryorthents	40	Very limited:		Very limited:		Very limited:	
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Flooding	0.40	Flooding	0.40		
165:							
Saulich	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to permafrost	0.99	Seepage	1.00
		Depth to permafrost	0.99			Content of organic matter	1.00
						Depth to permafrost	0.99
166:							
Saulich	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to permafrost	0.99	Seepage	1.00
		Depth to permafrost	0.99	Slope	0.16	Content of organic matter	1.00
		Slope	0.16			Depth to permafrost	0.99
167:							
Saulich	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Slope	1.00	Seepage	1.00
		Slope	1.00	Depth to permafrost	0.99	Content of organic matter	1.00
		Depth to permafrost	0.99			Slope	1.00

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)		
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
168:								
Saulich	40	Very limited:		Very limited:		Very limited:		
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00	
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Content of organic matter	1.00	Depth to permafrost	0.99	Seepage	1.00	
		Depth to permafrost	0.99			Content of organic matter	1.00	
						Depth to permafrost	0.99	
Minto	40	Very limited:		Very limited:		Very limited:		
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Slope	0.04	Slope	0.04	Slope	0.04	
169:								
Saulich	40	Very limited:		Very limited:		Very limited:		
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00	
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Content of organic matter	1.00	Slope	1.00	Seepage	1.00	
		Slope	1.00	Depth to permafrost	0.99	Content of organic matter	1.00	
		Depth to permafrost	0.99			Slope	1.00	
Minto	35	Very limited:		Very limited:		Very limited:		
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Slope	1.00	Slope	1.00	Slope	1.00	
170:								
Steese	80	Very limited:		Very limited:		Very limited:		
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00	
		Seepage	1.00	Depth to bedrock	1.00			
171:								
Steese	80	Very limited:		Very limited:		Very limited:		
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00	
		Seepage	1.00	Depth to bedrock	1.00	Slope	0.16	
		Slope	0.16	Slope	0.16			
172:								
Steese	70	Very limited:		Very limited:		Very limited:		
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00	
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00	
		Slope	1.00	Slope	1.00			
173:								
Steese	75	Very limited:		Very limited:		Very limited:		
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00	
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00	
		Seepage	1.00	Depth to bedrock	1.00			
174:								
Steese	85	Very limited:		Very limited:		Very limited:		
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00	
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00	
		Seepage	1.00	Depth to bedrock	1.00			
175:								
Steese	90	Very limited:		Very limited:		Very limited:		
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00	
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00	
		Seepage	1.00	Depth to bedrock	1.00			

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
176:							
Steese	55	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
Gilmore	25	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
177:							
Steese	50	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		
Gilmore	40	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
178:							
Steese	50	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		
Gilmore	40	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
179:							
Steese	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00		
Gilmore	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
180:							
Tanacross	90	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Flooding	0.40		
181:							
Tanana	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
		Flooding	0.40	Flooding	0.40		

Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill (Standard criteria)		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)		
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
182:							
Tanana	60	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
		Flooding	0.40	Flooding	0.40		
Mosquito	20	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Depth to permafrost	0.92	Seepage	1.00
		Depth to permafrost	0.92	Flooding	0.40	Content of organic matter	1.00
		Flooding	0.40			Depth to permafrost	0.92
183:							
Typic Cryaquents	30	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
Histic Cryaquepts	25	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Terric Cryofibrists	20	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	0.50	Seepage	1.00	Too clayey	0.50
184:							
Typic Cryorthents	80	Very limited:		Somewhat limited:		Very limited:	
		Seepage	1.00	Flooding	0.40	Too Sandy	1.00
		Too Sandy	1.00				
		Flooding	0.40				
185:							
Typic Cryorthents, fill	45	Very limited:		Very limited:		Very limited:	
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Flooding	0.40	Flooding	0.40		
Urban land	45	Not rated		Not rated		Not rated	
186:							
Urban land	100	Not rated		Not rated		Not rated	
187:							
Water	100	Not rated		Not rated		Not rated	

Table 18. Construction Materials: Gravel and Sand

(This table gives soil suitability ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the potential limitation. Information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
101:					
Bolio	75	Improbable:		Improbable:	
		Organic soil	0.00	Organic soil	0.00
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00
102:					
Bradway	85	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.21	No permafrost depth limitation	0.21
103:					
Chatanika	75	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
104:					
Chatanika	75	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
105:					
Chatanika	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
106:					
Chatanika	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
107:					
Chatanika	55	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
Goldstream	35	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.00	No permafrost depth limitation	0.00
108:					
Chena	90	Gravel source		Sand source	
109:					
Dumps, landfill	100	Not rated		Not rated	
110:					
Dumps, mine	100	Not rated		Not rated	
111:					
Eielson	80	Gravel source		Improbable:	
				Bottom layer not a source	0.00

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
112:					
Eielson	60	Gravel source		Improbable: Bottom layer not a source	0.00
Piledriver	30	Gravel source		Sand source	
113:					
Eielson	50	Gravel source		Improbable: Bottom layer not a source	0.00
Tanana	35	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
		No permafrost depth limitation	0.14	No permafrost depth limitation	0.14
114:					
Ester	70	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00
115:					
Ester	75	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00
116:					
Fairbanks	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
117:					
Fairbanks	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
118:					
Fairbanks	70	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
119:					
Fairbanks	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
120:					
Fairbanks	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
121:					
Fairbanks, strongly sloping	60	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Fairbanks, steep	30	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
122:					
Fairbanks	55	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Steese	30	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
123:					
Fairbanks	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Steese	30	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
124:					
Fubar	50	Gravel source		Sand source	
Piledriver	40	Gravel source		Sand source	
125:					
Gilmore	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
126:					
Gilmore	70	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
127:					
Gilmore	75	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
128:					
Gilmore	70	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
129:					
Gilmore	85	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
130:					
Gilmore	85	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
131:					
Gilmore	40	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Ester	40	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00
132:					
Gilmore	65	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Steese	33	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
133:					
Goldstream	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.00	No permafrost depth limitation	0.00
134:					
Goldstream	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.00	No permafrost depth limitation	0.00
135:					
Goldstream	50	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.00	No permafrost depth limitation	0.00
Histels	45	Improbable:		Improbable:	
		Organic soil	0.00	Organic soil	0.00
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
136:					
Histels	90	Improbable:		Improbable:	
		Organic soil	0.00	Organic soil	0.00
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00
137:					
Jarvis	75	Gravel source		Sand source	
138:					
Jarvis	55	Gravel source		Sand source	
Chena	35	Gravel source		Sand source	
139:					
Jarvis	45	Gravel source		Sand source	
Salchaket	45	Gravel source		Sand source	
140:					
Lemeta	75	Improbable:		Improbable:	
		Organic soil	0.00	Organic soil	0.00
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.00	No permafrost depth limitation	0.00
141:					
Liscum	50	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Noonku	45	Gravel source		Improbable:	
				Bottom layer not a source	0.00
142:					
Minto	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
143:					
Minto	70	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
144:					
Minto	60	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
145:					
Minto	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Chatanika	40	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
146:					
Minto	40	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Chatanika	35	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
147:					
Minto	45	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Chatanika	40	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.01	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.01
148:					
Minto	45	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Chatanika	40	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.01	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.01
149:					
Mosquito	85	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.08	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.08
150:					
Mosquito	45	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.08	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.08
Noonku	40	Gravel source		Improbable: Bottom layer not a source	0.00
151:					
Noonku	80	Gravel source		Improbable: Bottom layer not a source	0.00
152:					
North Pole	85	Gravel source		Improbable: Bottom layer not a source	0.00
153:					
North Pole	50	Gravel source		Improbable: Bottom layer not a source	0.00
Mosquito	30	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.08	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.08
Liscum	20	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
154:					
North Pole	55	Gravel source		Improbable: Bottom layer not a source	0.00
Noonku	25	Gravel source		Improbable: Bottom layer not a source	0.00
155:					
Peede	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
156:					
Peede	70	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Mosquito	25	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.08	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.08
157:					
Piledriver	75	Gravel source		Sand source	
158:					
Piledriver	50	Gravel source		Sand source	
Eielson	35	Gravel source		Improbable: Bottom layer not a source	0.00
159:					
Piledriver	50	Gravel source		Sand source	
Fubar	40	Gravel source		Sand source	
160:					
Pits, gravel	100	Not rated		Not rated	
161:					
Pits, quarry	100	Not rated		Not rated	
162:					
Riverwash	100	Not rated		Not rated	
163:					
Salchaket	85	Gravel source		Sand source	
164:					
Salchaket	45	Gravel source		Sand source	
Typic Cryorthents	40	Gravel source		Sand source	
165:					
Saulich	80	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.01	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.01
166:					
Saulich	80	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.01	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.01
167:					
Saulich	75	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.01	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.01
168:					
Saulich	40	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.01	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.01
Minto	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
169:					
Saulich	40	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
Minto	35	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
170:					
Steese	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
171:					
Steese	80	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
172:					
Steese	70	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
173:					
Steese	75	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
174:					
Steese	85	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
175:					
Steese	90	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
176:					
Steese	55	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Gilmore	25	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
177:					
Steese	50	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Gilmore	40	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
178:					
Steese	50	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Gilmore	40	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
179:					
Steese	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
Gilmore	45	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
180:					
Tanacross	90	Improbable:		Improbable:	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00

Table 18. Construction Materials: Gravel and Sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
181:					
Tanana	75	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.14	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.14
182:					
Tanana	60	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.14	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.14
Mosquito	20	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.08	Improbable: Bottom layer not a source; No permafrost depth limitation	0.00; 0.08
183:					
Typic Cryaquents	30	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Histic Cryaquepts	25	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Terric Cryofibrists	20	Improbable: Organic soil; Bottom layer not a source	0.00; 0.00	Improbable: Organic soil; Bottom layer not a source	0.00; 0.00
184:					
Typic Cryorthents	80	Gravel source		Improbable: Bottom layer not a source	0.00
185:					
Typic Cryorthents, fill	45	Gravel source		Sand source	
Urban land	45	Not rated		Not rated	
186:					
Urban land	100	Not rated		Not rated	
187:					
Water	100	Not rated		Not rated	

Table 19. Construction Materials: Topsoil and Roadfill

(This table gives soil suitability ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the potential limitation. Information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
101:					
Bolio	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00
		Too acid	0.12		
102:					
Bradway	85	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		No permafrost depth limitation	0.21	High frost action (check lower layers)	0.00
				No permafrost depth limitation	0.21
103:					
Chatanika	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		No permafrost depth limitation	0.01	High frost action (check lower layers)	0.00
				No permafrost depth limitation	0.01
104:					
Chatanika	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		No permafrost depth limitation	0.01	High frost action (check lower layers)	0.00
				No permafrost depth limitation	0.01
105:					
Chatanika	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		No permafrost depth limitation	0.01	High frost action (check lower layers)	0.00
		Slope	0.84	No permafrost depth limitation	0.01
106:					
Chatanika	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
107:					
Chatanika	55	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		No permafrost depth limitation	0.01	High frost action (check lower layers)	0.00
				No permafrost depth limitation	0.01
Goldstream	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.00	No permafrost depth limitation	0.00
		Too acid	0.18		

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
108:					
Chena	90	Poor:		Good source	
		Rock fragment content	0.00		
109:					
Dumps, landfill	100	Not rated		Not rated	
110:					
Dumps, mine	100	Not rated		Not rated	
111:					
Eielson	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
112:					
Eielson	60	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Piledriver	30	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
113:					
Eielson	50	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Tanana	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		No permafrost depth limitation	0.14	High frost action (check lower layers)	0.00
				No permafrost depth limitation	0.14
114:					
Ester	70	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Depth to permafrost	0.00	Slope	0.00
		Depth to bedrock	0.00	Depth to permafrost	0.00
		Too acid	0.18		
115:					
Ester	75	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	Slope	0.00
		Depth to permafrost	0.00	High frost action (check lower layers)	0.00
		Depth to bedrock	0.00	Depth to permafrost	0.00
		Too acid	0.18		
116:					
Fairbanks	80	Good source		Poor:	
				High frost action (check lower layers)	0.00

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
117:					
Fairbanks	80	Fair:		Poor:	
		Slope	0.84	High frost action (check lower layers)	0.00
118:					
Fairbanks	70	Poor:		Poor:	
		Slope	0.00	High frost action (check lower layers)	0.00
119:					
Fairbanks	80	Poor:		Poor:	
		Slope	0.00	High frost action (check lower layers)	0.00
				Slope	0.00
120:					
Fairbanks	85	Poor:		Poor:	
		Slope	0.00	Slope	0.00
				High frost action (check lower layers)	0.00
121:					
Fairbanks, strongly sloping	60	Fair:		Poor:	
		Slope	0.84	High frost action (check lower layers)	0.00
Fairbanks, steep	30	Poor:		Poor:	
		Slope	0.00	Slope	0.00
				High frost action (check lower layers)	0.00
122:					
Fairbanks	55	Poor:		Poor:	
		Slope	0.00	High frost action (check lower layers)	0.00
Steese	30	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Moderate frost action (check lower layers)	0.50
123:					
Fairbanks	40	Poor:		Poor:	
		Slope	0.00	High frost action (check lower layers)	0.00
				Slope	0.00
Steese	30	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
124:					
Fubar	50	Poor:		Good source	
		Rock fragment content	0.00		
Piledriver	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
125:					
Gilmore	80	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
126:					
Gilmore	70	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Slope	0.84		
127:					
Gilmore	75	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Slope	0.00	Slope	0.98
128:					
Gilmore	70	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
129:					
Gilmore	85	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
130:					
Gilmore	85	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
131:					
Gilmore	40	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Slope	0.00	Slope	0.98
Ester	40	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Depth to permafrost	0.00	Slope	0.00
		Depth to bedrock	0.00	Depth to permafrost	0.00
		Too acid	0.18		
132:					
Gilmore	65	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
Steese	33	Fair:		Poor:	
		Depth to bedrock	0.79	Depth to bedrock	0.00
				Moderate frost action (check lower layers)	0.50

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
133:					
Goldstream	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.00	No permafrost depth limitation	0.00
		Too acid	0.18		
134:					
Goldstream	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.00	No permafrost depth limitation	0.00
		Too acid	0.18		
135:					
Goldstream	50	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.00	No permafrost depth limitation	0.00
		Too acid	0.18		
Histels	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00
		Too acid	0.18		
136:					
Histels	90	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00
		Too acid	0.18		
137:					
Jarvis	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
138:					
Jarvis	55	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
Chena	35	Poor:		Good source	
		Rock fragment content	0.00		
139:					
Jarvis	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
Salchaket	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
140:					
Lemeta	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.00	No permafrost depth limitation	0.00
		Too acid	0.76		
141:					
Liscum	50	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Noonku	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
142:					
Minto	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
143:					
Minto	70	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
144:					
Minto	60	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.96	High frost action (check lower layers)	0.00
145:					
Minto	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Chatanika	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		No permafrost depth limitation	0.01	High frost action (check lower layers)	0.00
				No permafrost depth limitation	0.01
146:					
Minto	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Chatanika	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		No permafrost depth limitation	0.01	High frost action (check lower layers)	0.00
				No permafrost depth limitation	0.01

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
147:					
Minto	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.96	High frost action (check lower layers)	0.00
Chatanika	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		No permafrost depth limitation	0.01	High frost action (check lower layers)	0.00
		Slope	0.96	No permafrost depth limitation	0.01
148:					
Minto	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.00	High frost action (check lower layers)	0.00
Chatanika	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		No permafrost depth limitation	0.01	High frost action (check lower layers)	0.00
		Slope	0.37	No permafrost depth limitation	0.01
149:					
Mosquito	85	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.08	No permafrost depth limitation	0.08
150:					
Mosquito	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.08	No permafrost depth limitation	0.08
Noonku	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
151:					
Noonku	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
152:					
North Pole	85	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
153:					
North Pole	50	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Mosquito	30	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.08	No permafrost depth limitation	0.08
Liscum	20	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
154:					
North Pole	55	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Noonku	25	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
155:					
Peede	85	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
156:					
Peede	70	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Mosquito	25	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.08	No permafrost depth limitation	0.08
157:					
Piledriver	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
158:					
Piledriver	50	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Eielson	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
159:					
Piledriver	50	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Fubar	40	Poor:		Good source	
		Rock fragment content	0.00		
160:					
Pits, gravel	100	Not rated		Not rated	
161:					
Pits, quarry	100	Not rated		Not rated	
162:					
Riverwash	100	Not rated		Not rated	
163:					
Salchaket	85	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
164:					
Salchaket	45	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				Moderate frost action (check lower layers)	0.50
Typic Cryorthents	40	Poor:		Fair:	
		Rock fragment content	0.00	Moderate frost action (check lower layers)	0.50
165:					
Saulich	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
		Too acid	0.95		
166:					
Saulich	80	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
		Slope	0.84		
		Too acid	0.95		
167:					
Saulich	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Slope	0.00	No permafrost depth limitation	0.01
		No permafrost depth limitation	0.01		
		Too acid	0.95		

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
168:					
Saulich	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.01	No permafrost depth limitation	0.01
		Too acid	0.95		
Minto	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.96	High frost action (check lower layers)	0.00
169:					
Saulich	40	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Slope	0.00	No permafrost depth limitation	0.01
		No permafrost depth limitation	0.01		
		Too acid	0.95		
Minto	35	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Slope	0.00	High frost action (check lower layers)	0.00
170:					
Steese	80	Fair:		Poor:	
		Depth to bedrock	0.79	Depth to bedrock	0.00
				Moderate frost action (check lower layers)	0.50
171:					
Steese	80	Fair:		Poor:	
		Depth to bedrock	0.79	Depth to bedrock	0.00
		Slope	0.84	Moderate frost action (check lower layers)	0.50
172:					
Steese	70	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Moderate frost action (check lower layers)	0.50
173:					
Steese	75	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
174:					
Steese	85	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
175:					
Steese	90	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
176:					
Steese	55	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Moderate frost action (check lower layers)	0.50
Gilmore	25	Poor:		Poor:	
		Rock fragment content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
		Slope	0.00		
177:					
Steese	50	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
Gilmore	40	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
178:					
Steese	50	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
Gilmore	40	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
179:					
Steese	45	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.79	Slope	0.00
				Moderate frost action (check lower layers)	0.50
Gilmore	45	Poor:		Poor:	
		Slope	0.00	Depth to bedrock	0.00
		Rock fragment content	0.00	Slope	0.00
		Depth to bedrock	0.00	Moderate frost action (check lower layers)	0.50
180:					
Tanacross	90	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		Depth to permafrost	0.00	Depth to permafrost	0.00
		Too acid	0.32		
181:					
Tanana	75	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		No permafrost depth limitation	0.14	High frost action (check lower layers)	0.00
				No permafrost depth limitation	0.14

Table 19. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
182:					
Tanana	60	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		No permafrost depth limitation	0.14	High frost action (check lower layers)	0.00
				No permafrost depth limitation	0.14
Mosquito	20	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
		No permafrost depth limitation	0.08	No permafrost depth limitation	0.08
183:					
Typic Cryaquents	30	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Histic Cryaquepts	25	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
				High frost action (check lower layers)	0.00
Terric Cryofibrists	20	Poor:		Poor:	
		Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Content of organic matter	0.00	High frost action (check lower layers)	0.00
				Low strength	0.00
184:					
Typic Cryorthents	80	Good source		Fair:	
				Moderate frost action (check lower layers)	0.50
185:					
Typic Cryorthents, fill	45	Poor:		Fair:	
		Rock fragment content	0.00	Moderate frost action (check lower layers)	0.50
Urban land	45	Not rated		Not rated	
186:					
Urban land	100	Not rated		Not rated	
187:					
Water	100	Not rated		Not rated	

Table 20. Hydric Soils List

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria: Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
101:						
Bolio (75%)	Yes	depressions on terraces, flats on terraces	1,3	Yes	No	Yes
Goldstream (10%)	Yes	valley floors	2B3,3	Yes	No	Yes
Lemeta (10%)	Yes	fens on terraces	1,3	Yes	No	Yes
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Water (0%)	Unranked	depressions	---	---	---	---
102:						
Bradway (85%)	Yes	depressions	2B3,3	Yes	No	Yes
Mosquito (5%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
North Pole (5%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
Tanana (3%)	Yes	terraces	2B3,3	Yes	No	Yes
Noonku (2%)	Yes	sloughs	2B3,3	Yes	No	Yes
103:						
Chatanika (75%)	Yes	hills	2B3	Yes	No	No
Goldstream (10%)	Yes	valley floors	2B3,3	Yes	No	Yes
Chatanika, slopes more than 3 percent (7%)	Yes	hills	2B3	Yes	No	No
Minto (5%)	No	hills	---	---	---	---
Saulich (3%)	Yes	valley sides	2B3	Yes	No	No
Histels (0%)	Yes	depressions on terraces, flats on terraces	1,3	Yes	No	Yes
Water (0%)	Unranked	depressions	---	---	---	---
104:						
Chatanika (75%)	Yes	hills	2B3	Yes	No	No
Chatanika, slopes less than 3 percent (5%)	Yes	hills	2B3	Yes	No	No
Chatanika, slopes more than 7 percent (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	valley sides	2B3	Yes	No	No
105:						
Chatanika (80%)	Yes	hills	2B3	Yes	No	No
Chatanika, slopes less than 7 percent (5%)	Yes	hills	2B3	Yes	No	No
Chatanika, slopes more than 12 percent (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria: Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
106:						
Chatanika (80%)	Yes	hills	2B3	Yes	No	No
Chatanika, slopes less than 12 percent (10%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
107:						
Chatanika (55%)	Yes	hills	2B3	Yes	No	No
Goldstream (35%)	Yes	valley floors	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
Chatanika, slopes more than 5 percent (3%)	Yes	hills	2B3	Yes	No	No
Histels (2%)	Yes	depressions on terraces, flats on terraces	1,3	Yes	No	Yes
Water (0%)	Unranked	depressions	---	---	---	---
108:						
Chena (90%)	No	stream terraces	---	---	---	---
Jarvis (5%)	No	flood plains	---	---	---	---
Noonku (5%)	Yes	sloughs	2B3,3	Yes	No	Yes
109:						
Dumps, landfill (100%)	Unranked	sanitary landfills	---	---	---	---
110:						
Dumps, mine (100%)	Unranked	spoil piles	---	---	---	---
111:						
Eielson (80%)	No	flood plains	---	---	---	---
Peede (10%)	Yes	depressions on flood plains	3,2B3	Yes	No	Yes
Tanana (10%)	Yes	terraces	2B3,3	Yes	No	Yes
112:						
Eielson (60%)	No	flood plains	---	---	---	---
Piledriver (30%)	No	flood plains	---	---	---	---
Fubar (5%)	No	flood plains	---	---	---	---
Noonku (3%)	Yes	sloughs	3,2B3	Yes	No	Yes
Salchaket (2%)	No	flood plains	---	---	---	---
113:						
Eielson (50%)	No	flood plains	---	---	---	---
Tanana (35%)	Yes	terraces	2B3,3	Yes	No	Yes
Peede (10%)	Yes	depressions on flood plains	2B3,3	Yes	No	Yes
Tanacross (5%)	Yes	alluvial flats	2B3,3	Yes	No	Yes

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
114:						
Ester (70%)	Yes	hills	2B2,2B3	Yes	No	No
Brigadier (5%)	No	hills	---	---	---	---
Ester, rolling (5%)	Yes	hills	2B3,2B2	Yes	No	No
Ester, very steep (5%)	Yes	hills	2B3,2B2	Yes	No	No
Gilmore (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	valley sides	2B3	Yes	No	No
Steese (5%)	No	hills	---	---	---	---
115:						
Ester (75%)	Yes	hills	2B3,2B2	Yes	No	No
Brigadier (10%)	No	hills	---	---	---	---
Ester, slopes less than 45 percent (10%)	Yes	hills	2B2,2B3	Yes	No	No
Gilmore (5%)	No	hills	---	---	---	---
116:						
Fairbanks (80%)	No	hills	---	---	---	---
Minto (10%)	No	hills	---	---	---	---
Fairbanks, slopes less than 3 percent (5%)	No	hills	---	---	---	---
Fairbanks, slopes more than 7 percent (5%)	No	hills	---	---	---	---
117:						
Fairbanks (80%)	No	hills	---	---	---	---
Fairbanks, slopes more than 12 percent (10%)	No	hills	---	---	---	---
Fairbanks, slopes less than 7 percent (5%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
118:						
Fairbanks (70%)	No	hills	---	---	---	---
Fairbanks, slopes less than 12 percent (10%)	No	hills	---	---	---	---
Fairbanks, slopes more than 20 percent (10%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
119:						
Fairbanks (80%)	No	hills	---	---	---	---
Fairbanks, slopes less than 20 percent (10%)	No	hills	---	---	---	---
Fairbanks, slopes more than 30 percent (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
120:						
Fairbanks (85%)	No	hills	---	---	---	---
Fairbanks, slopes less than 30 percent (5%)	No	hills	---	---	---	---
Fairbanks, slopes more than 45 percent (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
121:						
Fairbanks, strongly sloping (60%)	No	hills	---	---	---	---
Fairbanks, steep (30%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
122:						
Fairbanks (55%)	No	hills	---	---	---	---
Steese (30%)	No	hills	---	---	---	---
Fairbanks, slopes less than 12 percent (5%)	No	hills	---	---	---	---
Fairbanks, slopes more than 20 percent (3%)	No	hills	---	---	---	---
Steese, slopes more than 20 percent (3%)	No	hills	---	---	---	---
Gilmore (2%)	No	hills	---	---	---	---
Steese, slopes less than 12 percent (2%)	No	hills	---	---	---	---
123:						
Fairbanks (40%)	No	hills	---	---	---	---
Steese (30%)	No	hills	---	---	---	---
Fairbanks, slopes less than 20 percent (10%)	No	hills	---	---	---	---
Steese, slopes less than 20 percent (10%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese, slopes more than 30 percent (5%)	No	hills	---	---	---	---
124:						
Fubar (50%)	No	flood plains	---	---	---	---
Piledriver (40%)	No	flood plains	---	---	---	---
Eielson (5%)	No	flood plains	---	---	---	---
Noonku (3%)	Yes	sloughs	2B3,3	Yes	No	Yes
North Pole (2%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
125:						
Gilmore (80%)	No	hills	---	---	---	---
Gilmore, slopes less than 3 percent (10%)	No	hills	---	---	---	---
Gilmore, slopes more than 7 percent (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
126:						
Gilmore (70%)	No	hills	---	---	---	---
Gilmore, slopes more than 12 percent (13%)	No	hills	---	---	---	---
Gilmore, slopes less than 7 percent (10%)	No	hills	---	---	---	---
Steese (7%)	No	hills	---	---	---	---

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
127:						
Gilmore (75%)	No	hills	---	---	---	---
Gilmore, slopes less than 12 percent (10%)	No	hills	---	---	---	---
Gilmore, slopes more than 20 percent (10%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
128:						
Gilmore (70%)	No	hills	---	---	---	---
Gilmore, slopes less than 20 percent (12%)	No	hills	---	---	---	---
Steese (10%)	No	hills	---	---	---	---
Gilmore, slopes more than 30 percent (5%)	No	hills	---	---	---	---
Ester (3%)	Yes	hills	2B2,2B3	Yes	No	No
129:						
Gilmore (85%)	No	hills	---	---	---	---
Gilmore, slopes less than 30 percent (10%)	No	hills	---	---	---	---
Steese (3%)	No	hills	---	---	---	---
Rock outcrop (2%)	Unranked	hills	---	---	---	---
130:						
Gilmore (85%)	No	hills	---	---	---	---
Ester (5%)	Yes	hills	2B2,2B3	Yes	No	No
Gilmore, slopes less than 45 percent (5%)	No	hills	---	---	---	---
Steese (3%)	No	hills	---	---	---	---
Rock outcrop (2%)	Unranked	hills	---	---	---	---
131:						
Gilmore (40%)	No	hills	---	---	---	---
Ester (40%)	Yes	hills	2B2,2B3	Yes	No	No
Brigadier (12%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
Saulich (3%)	Yes	valley sides	2B3	Yes	No	No
132:						
Gilmore (65%)	No	hills	---	---	---	---
Steese (33%)	No	hills	---	---	---	---
Steese, slopes more than 15 percent (2%)	No	hills	---	---	---	---
133:						
Goldstream (80%)	Yes	valley floors	2B3,3	Yes	No	Yes
Chatanika (10%)	Yes	hills	2B3	Yes	No	No
Histels (5%)	Yes	depressions on terraces, flats on terraces	1,3	Yes	No	Yes
Goldstream, slopes more than 3 percent (3%)	Yes	valley floors	2B3,3	Yes	No	Yes
Typic Cryaquents (2%)	Yes	depressions	3,2B3	Yes	No	Yes

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria: Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
134:						
Goldstream (80%)	Yes	valley floors	2B3,3	Yes	No	Yes
Chatanika (10%)	Yes	hills	2B3	Yes	No	No
Histels (5%)	Yes	depressions on terraces, flats on terraces	1,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
Typic Cryaquents (0%)	Yes	depressions	2B3,3	Yes	No	Yes
135:						
Goldstream (50%)	Yes	valley floors	2B3,3	Yes	No	Yes
Histels (45%)	Yes	depressions on terraces, flats on terraces	1,3	Yes	No	Yes
Terric Cryofibrists (5%)	Yes	thermokarst depressions	1,3	Yes	No	Yes
136:						
Histels (90%)	Yes	depressions on terraces, flats on terraces	1,3	Yes	No	Yes
Goldstream (10%)	Yes	valley floors	2B3,3	Yes	No	Yes
137:						
Jarvis (75%)	No	flood plains	---	---	---	---
Salchaket (10%)	No	flood plains	---	---	---	---
Chena (5%)	No	stream terraces	---	---	---	---
Noonku (5%)	Yes	sloughs	3,2B3	Yes	No	Yes
Tanana (5%)	Yes	terraces	2B3,3	Yes	No	Yes
138:						
Jarvis (55%)	No	flood plains	---	---	---	---
Chena (35%)	No	stream terraces	---	---	---	---
Noonku (5%)	Yes	sloughs	2B3,3	Yes	No	Yes
Salchaket (5%)	No	flood plains	---	---	---	---
139:						
Jarvis (45%)	No	flood plains	---	---	---	---
Salchaket (45%)	No	flood plains	---	---	---	---
Tanana (5%)	Yes	terraces	2B3,3	Yes	No	Yes
Chena (2%)	No	stream terraces	---	---	---	---
Noonku (2%)	Yes	sloughs	3,2B3	Yes	No	Yes
North Pole (1%)	Yes	alluvial flats	2B3,3	Yes	No	Yes

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
140:						
Lemeta (75%)	Yes	fens on terraces	1,3	Yes	No	Yes
Bolio (10%)	Yes	depressions on terraces, flats on terraces	1,3	Yes	No	Yes
Goldstream (10%)	Yes	valley floors	2B3,3	Yes	No	Yes
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Water (0%)	Unranked	depressions	---	---	---	---
141:						
Liscum (50%)	Yes	alluvial flats	3,2B3	Yes	No	Yes
Noonku (45%)	Yes	sloughs	3,2B3	Yes	No	Yes
North Pole (5%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
142:						
Minto (80%)	No	hills	---	---	---	---
Chatanika (10%)	Yes	hills	2B3	Yes	No	No
Fairbanks (5%)	No	hills	---	---	---	---
Minto, slopes more than 3 percent (5%)	No	hills	---	---	---	---
143:						
Minto (70%)	No	hills	---	---	---	---
Chatanika (13%)	Yes	hills	2B3	Yes	No	No
Minto, slopes more than 7 percent (7%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Minto, slopes less than 3 percent (5%)	No	hills	---	---	---	---
144:						
Minto (60%)	No	hills	---	---	---	---
Chatanika (10%)	Yes	hills	2B3	Yes	No	No
Minto, slopes less than 7 percent (10%)	No	hills	---	---	---	---
Minto, slopes more than 12 percent (10%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	valley sides	2B3	Yes	No	No
145:						
Minto (45%)	No	hills	---	---	---	---
Chatanika (40%)	Yes	hills	2B3	Yes	No	No
Chatanika, slopes more than 3 percent (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes
Minto, slopes more than 3 percent (5%)	No	hills	---	---	---	---

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
146:						
Minto (40%)	No	hills	---	---	---	---
Chatanika (35%)	Yes	hills	2B3	Yes	No	No
Minto, slopes less than 3 percent (7%)	No	hills	---	---	---	---
Minto, slopes more than 7 percent (7%)	No	hills	---	---	---	---
Saulich (5%)	Yes	valley sides	2B3	Yes	No	No
Chatanika, slopes less than 3 percent (2%)	Yes	hills	2B3	Yes	No	No
Chatanika, slopes more than 7 percent (2%)	Yes	hills	2B3	Yes	No	No
Goldstream (2%)	Yes	valley floors	2B3,3	Yes	No	Yes
147:						
Minto (45%)	No	hills	---	---	---	---
Chatanika (40%)	Yes	hills	2B3	Yes	No	No
Minto, slopes more than 12 percent (10%)	No	hills	---	---	---	---
Chatanika, slopes less than 7 percent (5%)	Yes	hills	2B3	Yes	No	No
Typic Cryaquents (0%)	Yes	depressions	2B3,3	Yes	No	Yes
148:						
Minto (45%)	No	hills	---	---	---	---
Chatanika (40%)	Yes	hills	2B3	Yes	No	No
Minto, slopes more than 20 percent (7%)	No	hills	---	---	---	---
Chatanika, slopes less than 12 percent (5%)	Yes	hills	2B3	Yes	No	No
Saulich (3%)	Yes	valley sides	2B3	Yes	No	No
149:						
Mosquito (85%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Bolio (5%)	Yes	flats on terraces, depressions on terraces	1,3	Yes	No	Yes
Bradway (5%)	Yes	depressions	3,2B3	Yes	No	Yes
Liscum (5%)	Yes	alluvial flats	3,2B3	Yes	No	Yes
Water (0%)	Unranked	depressions	---	---	---	---
150:						
Mosquito (45%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Noonku (40%)	Yes	sloughs	2B3,3	Yes	No	Yes
Bradway (5%)	Yes	depressions	3,2B3	Yes	No	Yes
North Pole (5%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
Tanana (5%)	Yes	terraces	2B3,3	Yes	No	Yes

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria: Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
151:						
Noonku (80%)	Yes	sloughs	3,2B3	Yes	No	Yes
Liscum (5%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
North Pole (5%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
Tanacross (5%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
Tanana (5%)	Yes	terraces	2B3,3	Yes	No	Yes
152:						
North Pole (85%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
Tanana (5%)	Yes	terraces	2B3,3	Yes	No	Yes
Mosquito (3%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Noonku (3%)	Yes	sloughs	3,2B3	Yes	No	Yes
Eielson (2%)	No	flood plains	---	---	---	---
Liscum (2%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
153:						
North Pole (50%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
Mosquito (30%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Liscum (20%)	Yes	alluvial flats	3,2B3	Yes	No	Yes
Histels (0%)	Yes	depressions on flood plains, flats on flood plains	1,3	Yes	No	Yes
Typic Cryaquents (0%)	Yes	flood plains	3,2B3	Yes	No	Yes
154:						
North Pole (55%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
Noonku (25%)	Yes	sloughs	3,2B3	Yes	No	Yes
Bradway (5%)	Yes	depressions	3,2B3	Yes	No	Yes
Eielson (5%)	No	flood plains	---	---	---	---
Piledriver (5%)	No	flood plains	---	---	---	---
Tanana (5%)	Yes	terraces	2B3,3	Yes	No	Yes
155:						
Peede (85%)	Yes	depressions on flood plains	3,2B3	Yes	No	Yes
Mosquito (10%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Liscum (5%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
156:						
Peede (70%)	Yes	depressions on flood plains	3,2B3	Yes	No	Yes
Mosquito (25%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Liscum (5%)	Yes	alluvial flats	3,2B3	Yes	No	Yes

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
157:						
Piledriver (75%)	No	flood plains	---	---	---	---
Eielson (10%)	No	flood plains	---	---	---	---
Fubar (10%)	No	flood plains	---	---	---	---
Tanana (3%)	Yes	terraces	2B3,3	Yes	No	Yes
North Pole (2%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
158:						
Piledriver (50%)	No	flood plains	---	---	---	---
Eielson (35%)	No	flood plains	---	---	---	---
Fubar (5%)	No	flood plains	---	---	---	---
Noonku (5%)	Yes	sloughs	3,2B3	Yes	No	Yes
Riverwash (5%)	Unranked	flood plains	---	---	---	---
159:						
Piledriver (50%)	No	flood plains	---	---	---	---
Fubar (40%)	No	flood plains	---	---	---	---
Eielson (7%)	No	flood plains	---	---	---	---
Noonku (3%)	Yes	sloughs	3,2B3	Yes	No	Yes
160:						
Pits, gravel (100%)	Unranked	gravel pits	---	---	---	---
161:						
Pits, quarry (100%)	Unranked	quarries	---	---	---	---
162:						
Riverwash (100%)	Unranked	flood plains	---	---	---	---
163:						
Salchaket (85%)	No	flood plains	---	---	---	---
Jarvis (10%)	No	flood plains	---	---	---	---
Tanana (5%)	Yes	terraces	2B3,3	Yes	No	Yes
164:						
Salchaket (45%)	No	flood plains	---	---	---	---
Typic Cryorthents (40%)	No	flood plains, terraces	---	---	---	---
Jarvis (10%)	No	flood plains	---	---	---	---
Fubar (5%)	No	flood plains	---	---	---	---
165:						
Saulich (80%)	Yes	valley sides	2B3	Yes	No	No
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes
Saulich, slopes less than 3 percent (5%)	Yes	valley sides	2B3	Yes	No	No
Saulich, slopes more than 7 percent (5%)	Yes	valley sides	2B3	Yes	No	No
Chatanika (3%)	Yes	hills	2B3	Yes	No	No
Minto (2%)	No	hills	---	---	---	---

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
166:						
Saulich (80%)	Yes	valley sides	2B3	Yes	No	No
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes
Saulich, slopes less than 7 percent (5%)	Yes	valley sides	2B3	Yes	No	No
Saulich, slopes more than 12 percent (5%)	Yes	valley sides	2B3	Yes	No	No
Chatanika (3%)	Yes	hills	2B3	Yes	No	No
Minto (2%)	No	hills	---	---	---	---
167:						
Saulich (75%)	Yes	valley sides	2B3	Yes	No	No
Ester (5%)	Yes	hills	2B3,2B2	Yes	No	No
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes
Saulich, slopes less than 12 percent (5%)	Yes	valley sides	2B3	Yes	No	No
Saulich, slopes more than 20 percent (5%)	Yes	valley sides	2B3	Yes	No	No
Chatanika (3%)	Yes	hills	2B3	Yes	No	No
Minto (2%)	No	hills	---	---	---	---
168:						
Saulich (40%)	Yes	valley sides	2B3	Yes	No	No
Minto (40%)	No	hills	---	---	---	---
Minto, slopes more than 12 percent (5%)	No	hills	---	---	---	---
Saulich, slopes less than 7 percent (5%)	Yes	valley sides	2B3	Yes	No	No
Minto, slopes less than 7 percent (3%)	No	hills	---	---	---	---
Saulich, slopes more than 12 percent (3%)	Yes	valley sides	2B3	Yes	No	No
Chatanika (2%)	Yes	hills	2B3	Yes	No	No
Goldstream (2%)	Yes	valley floors	2B3,3	Yes	No	Yes
169:						
Saulich (40%)	Yes	valley sides	2B3	Yes	No	No
Minto (35%)	No	hills	---	---	---	---
Minto, slopes less than 12 percent (5%)	No	hills	---	---	---	---
Minto, slopes more than 20 percent (5%)	No	hills	---	---	---	---
Saulich, slopes more than 20 percent (5%)	Yes	valley sides	2B3	Yes	No	No
Chatanika (3%)	Yes	hills	2B3	Yes	No	No
Saulich, slopes less than 12 percent (3%)	Yes	valley sides	2B3	Yes	No	No
Ester (2%)	Yes	hills	2B3,2B2	Yes	No	No
Goldstream (2%)	Yes	valley floors	2B3,3	Yes	No	Yes

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
170:						
Steese (80%)	No	hills	---	---	---	---
Steese, slopes more than 7 percent (10%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
171:						
Steese (80%)	No	hills	---	---	---	---
Steese, slopes more than 12 percent (10%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
172:						
Steese (70%)	No	hills	---	---	---	---
Steese, slopes more than 20 percent (10%)	No	hills	---	---	---	---
Fairbanks (8%)	No	hills	---	---	---	---
Gilmore (7%)	No	hills	---	---	---	---
Steese, slopes less than 12 percent (5%)	No	hills	---	---	---	---
173:						
Steese (75%)	No	hills	---	---	---	---
Steese, slopes more than 30 percent (10%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese, slopes less than 20 percent (5%)	No	hills	---	---	---	---
Fairbanks (3%)	No	hills	---	---	---	---
Ester (2%)	Yes	hills	2B3,2B2	Yes	No	No
174:						
Steese (85%)	No	hills	---	---	---	---
Steese, slopes less than 30 percent (10%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
175:						
Steese (90%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese, slopes less than 45 percent (5%)	No	hills	---	---	---	---
176:						
Steese (55%)	No	hills	---	---	---	---
Gilmore (25%)	No	hills	---	---	---	---
Gilmore, slopes less than 12 percent (10%)	No	hills	---	---	---	---
Steese, slopes more than 20 percent (10%)	No	hills	---	---	---	---

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
177:						
Steese (50%)	No	hills	---	---	---	---
Gilmore (40%)	No	hills	---	---	---	---
Gilmore, slopes less than 20 percent (5%)	No	hills	---	---	---	---
Steese, slopes less than 20 percent (5%)	No	hills	---	---	---	---
178:						
Steese (50%)	No	hills	---	---	---	---
Gilmore (40%)	No	hills	---	---	---	---
Gilmore, slopes less than 30 percent (5%)	No	hills	---	---	---	---
Steese, slopes more than 45 percent (5%)	No	hills	---	---	---	---
179:						
Steese (45%)	No	hills	---	---	---	---
Gilmore (45%)	No	hills	---	---	---	---
Gilmore, slopes less than 45 percent (5%)	No	hills	---	---	---	---
Steese, slopes less than 45 percent (5%)	No	hills	---	---	---	---
180:						
Tanacross (90%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
Tanana (10%)	Yes	terraces	2B3,3	Yes	No	Yes
181:						
Tanana (75%)	Yes	terraces	2B3,3	Yes	No	Yes
Bolio (5%)	Yes	depressions on terraces, flats on terraces	1,3	Yes	No	Yes
Jarvis (5%)	No	flood plains	---	---	---	---
Noonku (5%)	Yes	sloughs	3,2B3	Yes	No	Yes
Salchaket (5%)	No	flood plains	---	---	---	---
Tanacross (5%)	Yes	alluvial flats	2B3,3	Yes	No	Yes
182:						
Tanana (60%)	Yes	terraces	2B3,3	Yes	No	Yes
Mosquito (20%)	Yes	depressions on alluvial flats	2B3,3	Yes	No	Yes
Jarvis (10%)	No	flood plains	---	---	---	---
Liscum (5%)	Yes	alluvial flats	3,2B3	Yes	No	Yes
Noonku (5%)	Yes	sloughs	3,2B3	Yes	No	Yes

Table 20. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
183:						
Typic Cryaquents (30%)	Yes	depressions on terraces	2B3,3	Yes	No	Yes
Histic Cryaquepts (25%)	Yes	depressions on terraces	2B3,3	Yes	No	Yes
Terric Cryofibrists (20%)	Yes	thermokarst depressions	3,1	Yes	No	Yes
Histels (15%)	Yes	depressions	1,3	Yes	No	Yes
Water (10%)	Unranked	depressions	---	---	---	---
184:						
Typic Cryorthents (80%)	No	flood plains, terraces	---	---	---	---
Fubar (5%)	No	flood plains	---	---	---	---
Jarvis (5%)	No	flood plains	---	---	---	---
Piledriver (5%)	No	flood plains	---	---	---	---
Salchaket (5%)	No	flood plains	---	---	---	---
185:						
Typic Cryorthents, fill (45%)	No	flood plains, terraces	---	---	---	---
Urban land (45%)	Unranked	urban land	---	---	---	---
Salchaket (5%)	No	flood plains	---	---	---	---
Jarvis (3%)	No	flood plains	---	---	---	---
Fubar (2%)	No	flood plains	---	---	---	---
186:						
Urban land (100%)	Unranked	urban land	---	---	---	---
187:						
Water (100%)	Unranked	lakes	---	---	---	---

Table 21. Classification of the Soils

Soil name	Family or higher taxonomic class
Bolio	Euic, subgelic Typic Hemistels
Bradway	Coarse-loamy, mixed, superactive, subgelic Typic Aquiturbels
Brigadier	Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts
Chatanika	Coarse-silty, mixed, superactive, subgelic Typic Aquiturbels
Chena	Sandy-skeletal, mixed Typic Cryorthents
Eielson	Coarse-loamy, mixed, superactive, nonacid Aquic Cryofluvents
Ester	Loamy-skeletal, mixed, superactive, subgelic, shallow Typic Histoturbels
Fairbanks	Coarse-silty, mixed, superactive Typic Eutrocryepts
Fubar	Sandy-skeletal, mixed Typic Cryofluvents
Gilmore	Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts
Goldstream	Coarse-silty, mixed, superactive, subgelic Typic Histoturbels
Histels	Histels
Histic Cryaquepts	Histic Cryaquepts
Jarvis	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Typic Cryofluvents
Lemeta	Euic, subgelic Typic Fibristels
Liscum	Coarse-loamy, mixed, superactive, nonacid Histic Cryaquepts
Minto	Coarse-silty, mixed, superactive Aquic Eutrocryepts
Mosquito	Coarse-loamy, mixed, superactive, subgelic Ruptic Histoturbels
Noonku	Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents
North Pole	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Aeric Cryaquepts
Peede	Coarse-silty, mixed, superactive, nonacid Typic Cryaquents
Piledriver	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Aquic Cryofluvents
Salchaket	Coarse-loamy, mixed, superactive, nonacid Typic Cryofluvents
Saulich	Coarse-silty, mixed, superactive, subgelic Typic Histoturbels
Steese	Coarse-loamy, mixed, superactive Typic Eutrocryepts
Tanacross	Coarse-loamy, mixed, superactive, subgelic Typic Histoturbels
Tanana	Coarse-loamy, mixed, superactive, subgelic Typic Aquiturbels
Terric Cryofibrists	Terric Cryofibrists
Typic Cryaquents	Typic Cryaquents
Typic Cryorthents	Typic Cryorthents

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